

# MICHIGAN FARMER

AND  
**LIVE STOCK**  
PUBLISHED WEEKLY.

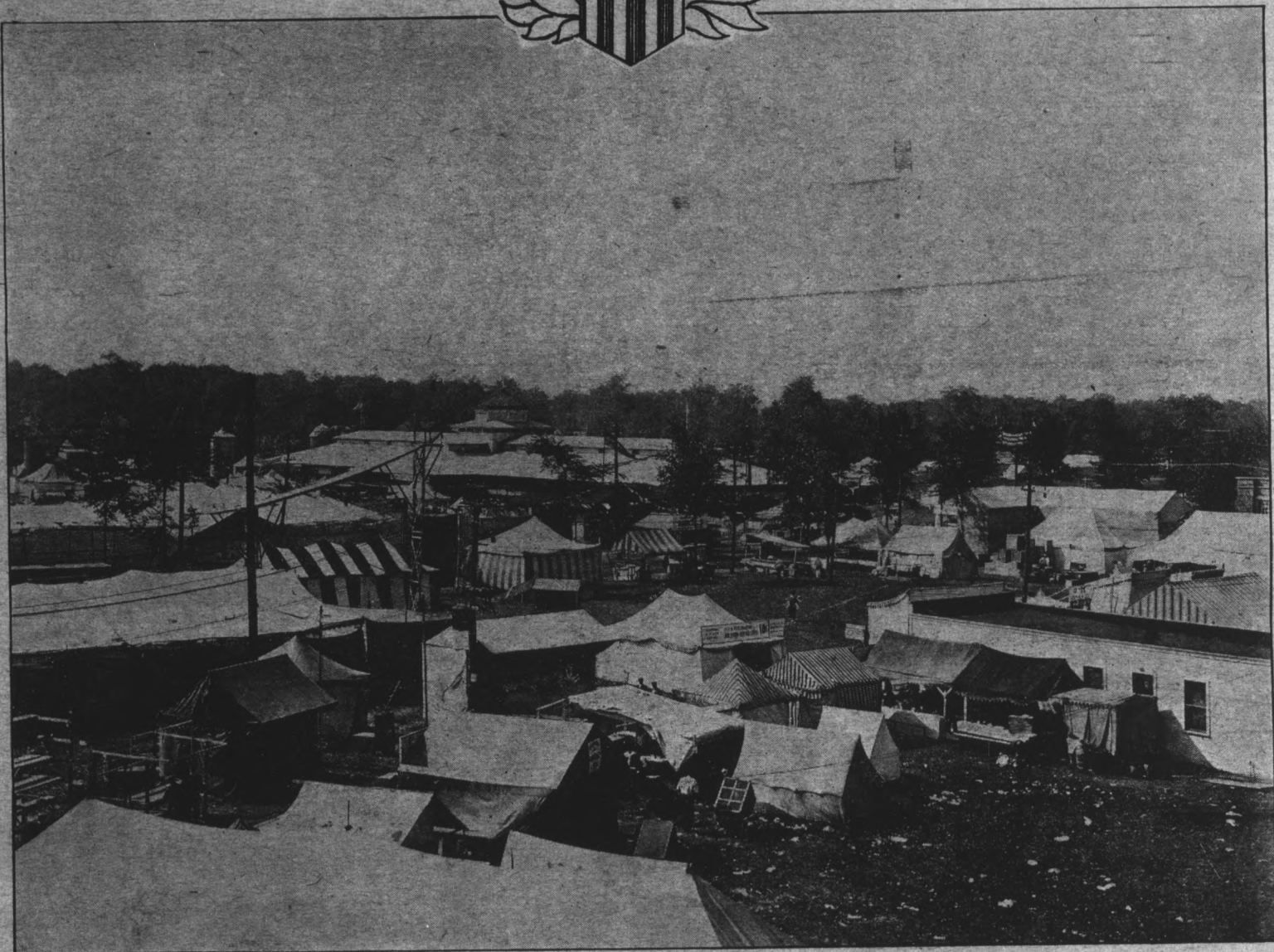
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DETROIT, AUGUST 30, 1919

## CURRENT COMMENT

### A Tempest in the Milk Pail

IT required a severe jolt to bring breeders of Holstein-Friesian dairy cattle to a realization of the fact that the great mass of dairy farmers of America are looking to them to furnish seed stock capable of high uniform production rather than a few exceptional individuals with phenomenal seven-day butter-fat records. Of course, a cow capable of producing an enormous amount of milk with an abnormal percentage of butter-fat must, of necessity, be a heavy producer for the year, yet a study of the milk and butter-fat records of famous cows indicates that many excellent yearly producers have failed to develop exceptional speed for the shorter race.

The fifty-pound dairy cow may be a reality; we do not desire to belittle the achievements of honest men who are in the breeding business to improve the productive capacity of so valuable an animal as the dairy cow, but so far as practical utility is concerned we doubt very much the value of such individuals from the standpoint of improving the dairy herds of the country. In the first place a few such records have done the breed as a whole, more harm than good, inasmuch as it has created a desire on the part of wealthy men and speculators to reach out for such prepotent blood in order that they might obtain control of it before men with less capital could get a stream of it coursing through the veins of the animals in their herds.

Not only has the use of the seven-day record as a basis of selection of breeding animals retarded the development of uniformly high producing cows, capable of making economical use of farm-grown feeds, but it has resulted in lowering the type and uniformity of the cows used for breeding purposes. Few experienced breeders will deny that the improvement of the type of Holstein-Friesian cattle has failed to keep pace with the seven-day production records made by a few of the great producers of the breed; and right here we wish to make it plain that the same line of reasoning applies with equal, if not greater force, to some of the other great breeds of dairy cattle now clamoring for popular favor in America.

We believe thoroughly in the honesty and integrity of President Aitken and the members of the executive committee of the Holstein-Friesian Association of America, and no fair-minded man will pass judgment upon the reliability of Holstein-Friesian records in general until these men have had

abundant opportunity to sift things to the bottom and throw out all records that are not above suspicion. If a few wealthy men and cow jockeys are found guilty of falsifying records or doing anything to knowingly perpetrate a fraud they must be given a swift and just recompense as well as the fellows who actually did the dirty work. Ambitious breeders of other breeds of dairy cattle will do well to investigate the reliability of the records made by some of the famous cows of their breeds rather than to attempt to make capital out of the mistakes of their fellow breeders. The small breeders and the dairy farmers of the country demand the real facts and unless they are promptly furnished the whole dairy industry is going to suffer great injury in the years to come.

Michigan breeders of Holstein-Friesian cattle, although they have furnished the foundation animals for most of the famous herds of the country, have never chased the rainbow of high seven-day records. As a class they have always found it more profitable to breed uniformly high producers than to sacrifice quality and uniformity of type for phenomenal production records. Even though Michigan breeders have been severely criticized for allowing men from other states to purchase their best cows and produce phenomenal records from them and their progeny they can now point with pride to their numerous thirty-pound cows, and feel that they have contributed more largely to the good of the dairy industry and the great black-and-white breed, than those who have allowed commercial cleverness to dull their sense of intrinsic value in breeding cattle.

### Labor and Living Costs

IT is to be hoped that the appeal for a labor truce until conditions return to a more normal basis made by President Wilson in announcing the decision of the Railroad Administration with regard to demanded wage increases, will be heeded by labor leaders in all lines of industry. There is no question that the President has spoken wisely in the statement to the effect that in the prevailing industrial unrest we are facing a situation which is quite likely to affect the happiness and prosperity, and even the lives of our people more seriously than the war itself. This statement may easily prove prophetic if there is not a general realization among labor leaders that further advances of wage scales under present conditions will tend to aggravate rather than remedy the general unrest by forcing a further advance in living costs which otherwise have probably reached their peak.

Economists have pointed out the fact that in the distribution of goods from the producer to the ultimate consumer two non-producers are employed to every producer. Obviously the non-producer must share in the increased remuneration demanded by producers in any department of production, with the result that the price of the goods produced must be increased to the consumer in a degree out of proportion to any possible further increase in his wage scale.

Nor is this taking into account the increased difficulty in the normal production of food stuffs if wage scales are forced still higher. Until the fact that abnormally high wage scales and cheap living costs cannot be for long coexistent is generally appreciated by all classes, there is apparently no solution in sight for the industrial unrest which pervades the country at the present time. Until government officials, labor leaders, and the consuming public at large have grasped the fact that the maintenance of an adequate food supply in this country depends upon the economic conditions surrounding the business of food production, the

impending crisis will not have been safely passed.

But the duty of disseminating information relating to the economics of production clearly rests with the producers themselves. They cannot expect other classes to secure this information on their own initiative. Hence the desirability of a comprehensive organization along the lines of the State Farm Bureaus which are being rapidly developed in many of our leading agricultural states, including Michigan, at the present time.

### The Rural School Problem

A RECENT statement issued by a member of the State Board of Education to the effect that there would be a shortage of more than five hundred school teachers in Michigan this year has a direct and important bearing on the country school problem. Naturally this shortage will be felt in country school districts where small schools with only a few pupils in attendance are maintained, and for this reason small wages are paid the teachers. The better jobs in city and village schools which pay better salaries will be first filled and the smaller country schools will take such teachers as are left or go without. With the prospect that a very considerable number of schools will not be able to find suitable teachers to start the school year, the only remedy in sight would be the transportation of pupils to nearby schools where teachers are obtainable. Thus economic conditions which have made a shortage in school teachers as well as in the ranks of labor and almost every industry, may bring about a desirable degree of consolidation of rural school districts along the lines which have been advocated by many educators during recent years. For a number of years the Michigan law has made the consolidation of rural schools into township unit systems feasible and easy where this has been considered favor among country people largely, we believe, on account of the transportation difficulty. While the necessity for consolidation because of shortage of available teachers will be regrettable, yet the experience obtained in forced trials of this kind will go far to demonstrate the feasibility of centralized rural schools and may in the end prove a blessing in disguise.

### Living Cost Comparisons

WHILE the problem of the high cost of living has caused not a little unrest in this country, it cannot be considered as a serious problem when compared to the plight in which the people of the belligerent countries of war stricken Europe find themselves. Present rates of foreign exchange in our money market constitute a true index of the prices which the people of foreign countries must pay for goods purchased in this country due to the lessened credit of foreign countries on account of their war expenditures and industrial disorganization. Present quotations of the English pound sterling in our money market indicates a depreciation of fourteen per cent in English currency as compared with American dollars, while present quotations of the Italian lire show a depreciation of approximately fifty per cent, the French franc a depreciation of nearly fifty-eight per cent, and the German mark a depreciation of eighty per cent, these figures compare with discount rates of one month ago of twelve and one-third per cent for Great Britain, twenty-eight per cent for France, forty per cent for Italy, and sixty-five and a half per cent for Germany. In other words, a dollar's worth of English money under a normal exchange basis will buy approximately eighty-six cents worth of American goods as measured

by the present purchasing value of our dollar, while a dollar's worth of Italian money on a normal exchange basis will buy only fifty cents worth of American goods; a dollar's worth of French money only forty-two cents worth; and a dollar's worth of German money only twenty cents worth. When these values are compared with the shrunken purchasing value of our own dollar, we have a better realization of the high cost of the living problem which confronts the peoples of countries named.

We also gather an appreciation of the futility of the sometime proposed embargo scheme to reduce the cost of living in this country. We can also appreciate, in a measure, the necessity of the extension of business credit to those countries for needed goods not only to the end that their people may be saved from starvation, but that a market for our surplus products be maintained and our own continued prosperity thus assured.

## News of the Week

Wednesday, August 20.

GENERAL PERSHING visits Italian battlefields.—The lower house of congress repeals the daylight saving law by a vote of 223 to 101 over President Wilson's veto.—Serious damage is done French vineyards by a heat wave which reaches 140 degrees F. in some districts.—The towns of East Helena and Monarch, Mont., are threatened by forest fires.—President Wilson interprets the League of Nations covenant to the foreign relations committee of the United States Senate.—One man is slain in a riot at the packing plants strike in Milwaukee.—The attorney-general starts with the examination of officials of retail grocers and meat dealers' associations at Lansing before Judge Weist.

Thursday, August 21.

MEXICO asks the United States to withdraw troops who are pursuing the bandits who held American aviators for a ransom.—President Wilson delays speaking tour to hasten consideration of the peace treaty by the United States Senate.—Italian troops are moving toward the Hungarian frontier.—Six persons and fifteen injured in a head-on collision between two Pere Marquette trains at Grawn, Michigan.—Governor Sleeper suggests that he may call an extra session of the legislature to enact the necessary laws to curb profiteering.—A conference of leaders of the iron and steel workers is being held at Youngstown, Ohio, to consider the advisability of a nation-wide strike.—United States Senate confirms the nomination of A. Mitchell Palmer as United States Attorney-general.

Friday, August 22.

FOUR Mexican bandits are killed by American troops in Mexico, while two American fliers are missing.—The examination of witnesses reveals the practice of wasteful and indirect marketing methods, price fixing agreements among wholesalers, middlemen and manufacturers.—Quebec greets the Prince of Wales who lands at the ancient capitol of French Canada.—The federal government resumes active control of sugar prices, fixing eleven cents as the cost to consumers.—Herbert Hoover, head of the International Relief Association declares it imperative to displace Archduke Joseph of Hungary to give that nation a chance to establish popular government.—Three hundred navy officers resign because the pay for this service is too low.

Saturday, August 23.

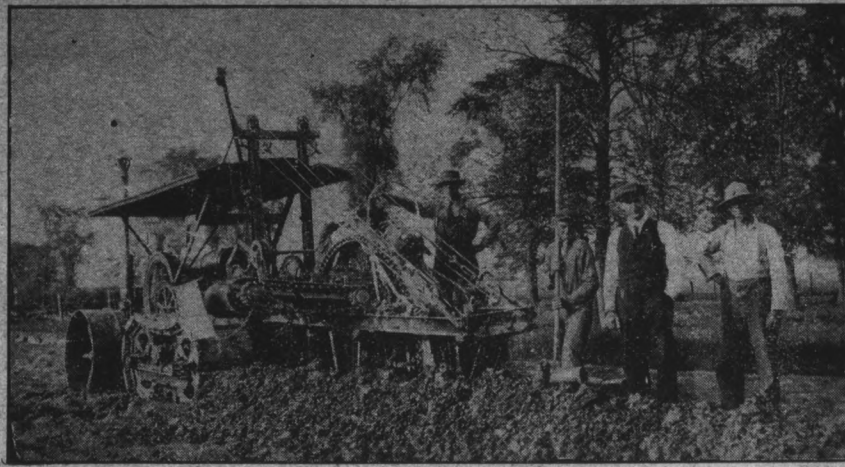
LOWER House of Congress amends the Lever food control act to include clothing, containers of food, feed, fertilizers, fuel, oil and implements used in the production of necessities, and to penalize profiteering by a \$5,000 fine or two years' imprisonment.—In the investigation by Judge Weist at Lansing into the retail business it is learned that retailers are selling shoes at fifty per cent above wholesale prices.—Despite protests from Mexico, American troops will continue their hunt for the Mexican bandits who held American aviators.—The Sinn Fein party of Ireland has arranged to borrow \$25,000,000 in this country.—United States Senate plans to consider peace treaty this coming week.—Additional naval appropriations are asked to keep American war ships ready for action.—The German National Assembly will investigate the responsibility for the great war.

(Continued on page 254).





The Tractor Ditcher at Work in St. Clair County.



Mr. Robey, with Cap, in Center, Supervising the Work.

## Better Drains at Less Cost

By J. B. Hasselman

EXTENSIVE drainage work being carried on in St. Clair county at the present time is attracting state-wide attention because of the fact that problems are being met and results are being attained which are of interest and value to the entire state, as well as to St. Clair county. Nearly three hundred acres, scattered over the county in twenty-five-acre tracts on a dozen different farms, are being tile drained in the operation, which is being handled under the direction of the Extension Division of the Michigan Agricultural College.

Michigan's general drainage problems are too well known to need any special emphasis. It can be safely stated that in many of the counties of the state there is no other thing which has reduced the yield of crops more during the last few years than the need of tile drainage. Much of the most valuable land of Michigan is producing either no crop at all or only a small percentage of what it could produce were it adequately drained. The value of drainage has been demonstrated by literally hundreds of years of experience, and the problem facing the drainage men of the state today is not one of whether or not drainage will pay, but rather one of finding the best methods and showing that the necessary expense of installation is worth while.

Drainage problems may be roughly divided into two groups: 1. The reclamation of swampy areas by extensive ditching systems, usually having an outlet into some stream or lake. 2. The drainage of wet lands which are at present under cultivation but which are not yielding as they should. The work in St. Clair county deals altogether with the second type of drainage. Although the reclamation of swampy sections is of great importance, the drainage of wet cultivated lands seems, from many points of view to offer an even greater field, and it is this phase of the work which is being taken up in the St. Clair project.

### St. Clair Problems Typical.

In taking up the drainage question in the state, the extension men of the agricultural college picked St. Clair as

a typical "in-need-of-drainage" county. is that the slowness of the operation tends to encourage incomplete and therefore unsatisfactory systems. According to O. E. Robey, drainage specialist at the college, about eighty per cent of the land in the county needs drainage, while before the present work was started practically no under-drainage had been put in in the county. In general, St. Clair has a



Using Team and Board Scraper in Covering the Tile.

level clay soil, with a quantity of sand, and is not high above the level of the lake. In addition to the above, water and unfavorable seasons had been ruining the crops in St. Clair for several years.

For these reasons St. Clair county was picked out for drainage demonstration work, and Mr. Robey, as the specialist, was put in charge. He was especially well fitted for the task, having already spent two years in the vicinity laying out drain systems and assisting farmers in purchasing tile and getting the work done. The county farm bureau cooperated in the work.

### Hand Methods Too Slow.

After looking over the situation Mr. Robey reached the conclusion that the day of hand methods in ditching work had gone by. The scarcity of labor in general, and more especially of expert drainage labor, made it out of the question to do much by hand. One

next step was to line up the tracts upon which the work was to be done, and nearly three hundred acres were quickly and easily secured. Inasmuch as the fundamental purpose of the work was to be a demonstration to show the results of thorough drainage and the machine method of installing it, the tracts selected were scattered over the whole county in twenty-acre plots. The fields were also selected along main highways where the results of the work may be observed, for interest in the drainage is already bringing visitors from far and wide.

### One Hundred Rods a Day.

Results of the operation are exceeding the expectations of those in charge. The machine has been putting in better than one hundred rods a day, a speed which is partly accounted for by the fact that the soil of the vicinity is suitable for machine work, being level and free from stones.

"I am so well pleased with the work

on my twenty-acre tract this year, and so satisfied that it will bring results that I am planning on draining forty acres next year," said H. A. Shaw, on whose farm one of the early tracts was worked.

### Soil Benefited by Drainage.

"Tile drainage not only removes the water from the surface," declares Mr. Robey, "but it also changes the character of the soil, making it easier to work. The drainage is therefore a great help during dry seasons, as well as a positive protection during wet ones. On land that needs drainage it is useless to try to increase the yield with fine seed and fertilizer and then have the crops drowned out."

### Tile Bought Cooperatively.

The tile used in the St. Clair work has been bought cooperatively, at a considerable saving. Cooperation of farmers in this project is effecting a saving all along the line. It is making possible the financing of a large machine with an expert crew, and is assuring the lowest possible cost in all the operation.

Farmers in St. Clair county who are in touch with the present work are showing strong interest in the future development of drainage in the county. The county drain commissioner recently remarked to Mr. Robey: "Every time you do any drainage work in a section of the county I have a new batch of petitions presented to me for outlet drainage," and this seems to reflect the general interest in drainage work. In fact, it bids fair to revolutionize the farming of St. Clair county.

### Extension to Rest of State.

H. H. Musselman, head of the Farm Mechanics Department at the Michigan Agricultural College, who has general supervision of the drainage work, says that present plans call for an extension of the work into other counties of the state where drainage is needed. Cooperative undertaking of the work by groups of farmers over the state will be the means used to spread the drainage efforts.

Already groups are getting together in St. Clair county to secure the services of ditching machines. One group (Continued on page 237).



Poor Drainage is a Serious Handicap to Growing Crops.



Good Drainage Produces Results and Soon Pays for Itself.



# News of the Agricultural World

## NEW ENGLAND FARMERS TO JOIN NATIONAL FARM BUREAU.

AT Bellows Falls, Vermont, on August 20, at the Westminster Club, the representatives of the various New England states met. All the states were represented except Rhode Island. The Rhode Island representative did not receive his notice in time owing to a mistake in the mailing.

Those present from Vermont were L. K. Osgood, Rutland, and E. B. Cornwall, Middlebury, delegates. Mr. Thos. Bradlee, Burlington, also attended. From Massachusetts Mr. E. F. Richardson, Millis, and Mr. F. W. Burham, Greenfield, as delegates. Also Mr. R. W. Redman, Amherst. From New Hampshire Mr. George A. Hill, Concord, and Mr. George M. Putnam, Contoocook. From Maine, Mr. George G. Young, Turner. From Connecticut, Mr. C. H. Savage, Stowers, and Mrs. S. M. Buckingham, Watertown, as delegates. Also Mr. R. E. Dodge, Stowers.

The meeting was called to order by Mr. E. B. Cornwall, the New England representative on the national organization committee. Mr. Cornwall was elected chairman of the meeting and Mr. George G. Young secretary. It was the unanimous opinion of those present that all of the New England States should join the National Federation and that each state should have a representative at the national meeting in November. It was felt by all that this was a movement of far-reaching importance and that it would strengthen and broaden the activities of the farm bureaus, and will be a universal organization representing all the farmers of the country. A proposed draft of constitution for the national organization was formulated and matters of organization and policy were discussed.

## THE WESTERN NEW YORK APPLE PROSPECTS DWINDLE.

PROSPECTS of an apple crop in the western New York territory are steadily dwindling. This is borne out by the August estimate of the Federal Bureau of Crop Estimates. The crop estimate for the entire district now stands at twenty-one per cent, against the previous estimate, thirty per cent. By counties in the territory, Wayne has twenty-two per cent; Monroe eighteen; Orleans and Niagara twenty-five; Wyoming, Genesee and Yates and other of the less important fruit counties here, about twenty per cent of a full crop based on the last ten-year average. It is estimated that the pack will run from twenty-five to forty per cent A grade. Scab is in large degree responsible for this poor quality as previously pointed out. The yield will be about twenty-eight per cent of the 1918 crop, which was seventy-five per cent of an average.

E. E. R.

## PREVENT SPOILING OF FOOD.

WITH the cost of living as high as it is, permitting good food to spoil in transit and in the hands of dealers is more noticeably wasteful than ever before, says the Department of Agriculture in a statement made public recently. Yet a great deal of food is constantly lost in that way. In order to prevent as much of it as possible, the United States Department of Agriculture has made extensive laboratory studies of the bacteria that produces spoilage, have developed methods of control through sanitation, sterilization, dehydration, and refrigeration, and is putting them in opera-

tion on a commercial scale. The work already done includes methods of candling, cooling, packing and shipping eggs; the pre-cooling of plants, together with model refrigerator cars, and methods of killing, dressing, packing and shipping, to permit small shipments of dressed chickens and turkeys to secure the minimum of spoilage; methods of preventing spoilage in commercially canned tomatoes, catsup, tomato pulp, and similar articles; improved methods of handling, packing, and shipping shrimp and sardines and best methods of shipping fresh fish to inland cities. Investment of methods in canning salmon. Experiments are being conducted, also, with a view to developing methods of drying fruits and vegetables that will preserve the delicate flavor of the original products and to establish a permanent drying industry in the United States.

## SWISS NOW IMPORT LIVE STOCK PRODUCTS.

THERE is a general shortage of all classes of live stock, meats, and dairy products in Switzerland with the exception of sheep, which have increased in number since the beginning of the war." And thus briefly summing up recent observations on the live stock of that country, George A. Bell and Turner Wright, representing the Department of Agriculture in Europe, report numerous other facts of interest to American live stock producers.

The feed situation in Switzerland has been critical owing to the inability to obtain oil cake and to the fact that the government required a larger amount of land to be plowed and planted to potato and other crops than in normal times. The cattle consequently are thinner in flesh and milk production has been greatly reduced. At the time of the observations of the department men, good milch cows in Switzerland were worth from \$500 to \$800, nearly four times their price before the war.

Estimates on the number of cattle indicate a decrease in cows, but an increase in yearling heifers compared with the pre-war period. Before the war Switzerland imported several thousand cattle from other European countries every year. This supply is now largely unavailable.

Cattle for breeding purposes cannot be imported into Switzerland, as the government regulations will not permit such importations. Furthermore, the American investigators found no desire on the part of breeders and farmers to import breeding stock, as they believe they have the best breeds for their conditions. It will be the

policy, however, to import animals for slaughter and meats in larger quantities than formerly until the Swiss herds are again restored. In the opinion of the department men, this should occur within three or four years.

From 1911 to 1918 horses in Switzerland declined in number about ten per cent and good draft horses have been worth from \$500 to \$800. The country districts appear to be very short of horses, but the situation apparently causes little concern, since the Swiss people work a large number of cattle. Cows and bulls are used as draft animals, as well as oxen. Oxen increased from about 44,000 to 58,000 head between 1916 and 1918. Dogs also are used to a considerable extent for hauling light carts.

## JERSEY BREEDERS MEET.

ABOUT fifty breeders of Jersey cattle assembled at the home of Mr. and Mrs. B. W. Mattoon, south of Cornua, Shiawassee county, on Friday, August 15, in their first annual picnic. It was a typical Jersey crowd. Farmers from all parts of the county left their harvest work to get together in honor of the Island Breed.

Animals were brought in from nearby herds and were closely inspected and criticized by the different breeders. Mr. H. F. Probert, of Jackson, Michigan, gave a talk on "Breeding and Selection," that was appreciated by everyone present. His talk was all the more interesting and instructive because he had a number of animals for comparison in bringing out the points which he wished to illustrate. Even the older breeders felt that Mr. Probert had given them something to take home and think about.

There are already approximately three hundred head of pure-bred Jersey cattle in the county and a number of new herds being established and to these new breeders the meeting was an inspiration and a help.

Plans are already being laid for the winter meeting in Owosso and at this time stress will undoubtedly be laid on the selection of the right kind of Jersey sires. An attempt will be made to have as many sires as possible brought to this meeting and in keeping with the Pure-bred Sire Campaign which at that time will be in full swing throughout the country it is expected that great benefit will come from the meeting.

## CONDENSERS CONTROL DAIRY SITUATION IN WASHINGTON.

THAT the condensers of Washington control the dairy situation now was the statement made by J. A. Scol-

lard, president of the United States Dairymen's Association at a recent combination picnic here of the dairymen, farmers' unions and chamber of commerce of Lewis county. "The condensing interests are shaping dairying in the wrong way," he said. "The condensers at Chehalis last month paid the dairymen \$2.75 per one hundred pounds for milk which tested 3.8 and the dairymen pays the freight from his farm to the condenser. It takes approximately one hundred pounds of milk to produce one case of condensed milk, forty-eight tall cans, and the price to the jobber last month was \$6.75 per case. There is a big discrepancy somewhere, and what the dairymen's organizations in this section propose to do is to take out that discrepancy."

The dairymen of Lewis-Pacific and adjoining counties are pledging \$10 per cow toward the purchase or construction of creameries in each of the milk producing centers, he said, and it is aimed to have these plants take all the milk the dairymen produce, manufacture butter and cheese, standardize the products under one name or brand, and market in quantities. Each plant will also be equipped to use the skim-milk in the manufacture of milk powder and other marketable by-products thus making use of the whole milk.

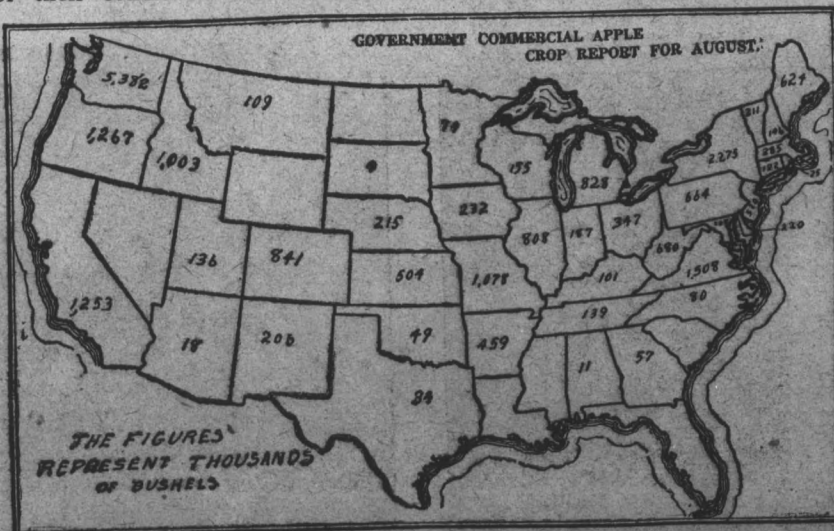
## MUST SUBMIT PRICES OF ACID PHOSPHATE.

HOLDING that a shortage of acid phosphate does not justify the prices that are being charged by manufacturers of this fertilizer, the United States Department of Agriculture has notified phosphate miners and acid phosphate manufacturers not to advance the present prices of rock phosphate or bulk acid phosphate without submitting the proposed increases, together with specific data on real and unavoidable higher costs of production since June, 1919. The department considers higher production costs the only possible justification for the increases in price since June.

Strikes in Florida and car shortages in Florida and Tennessee have combined to reduce production and shipment. To meet the shipping situation the department has urged the Railroad Administration to make available sufficient cars for fertilizer deliveries in the interest of crop production.

The prices quoted for straight acid phosphate in bags to dealers or individuals ordering thirty tons or more in the spring of 1919 was \$24 a ton f. o. b. Baltimore, Philadelphia and Carteret. The price asked for the fall trade is \$22.50 a ton. This obviously is not a reduction of thirty per cent—the reduction at which the department has notified farmers they should be able to obtain mixed fertilizers in the fall of 1919. On July 30 the department notified all acid phosphate manufacturers that in the future they would be required to base the price of straight acid phosphate on the actual cost of the materials of manufacture and sale, plus a reasonable profit, as a separate commodity, and that the cost of manufacturing mixed goods should not be prorated on the acid phosphate.

One good thing is coming out of the present after-the-war stringency, and that is, we are pulling out the half-worn coats and trousers that have been hanging in our closets, and wearing them out, instead of letting them rust out. These clothes are almost all better goods than can be bought today for love or money.







# Miss Dairymaid Succeeds J. Barleycorn

**P**ROHIBITION has brought many changes and more are coming.

Various business elements are already planning to meet the emergencies and the opportunities created by the coming of prohibition. One of these, the National Dairy Council, is now conducting a campaign for the establishment of dairy bars throughout the country, especially in those sections that were recently caused to mourn the death of John Barleycorn.

That there is a great opportunity for the establishment of dairy stands or dairy bars no one will deny if he has made a careful survey.

President M. D. Munn, of the National Dairy Council, is fostering this movement, and he is strongly of the opinion that dairy bars can be conducted successfully. The old liquor bar where beer is no longer sold, will make a splendid dairy bar where milk products can be served that will be better, and even pay better, than beer, and in time—and not a very long time at that—prove more popular than beer.

President Munn says: "There are dozens of different drinks that can be sold in a dairy bar, all of them with milk as the principal ingredient. Sweet milk charged with a little carbonated water to give it a tone makes a fine drink. Milk flavored with chocolate, cocoa or coffee and shaken sufficiently to aerate it is good; so is milk flavored with a little root beer or with sweet fruit juices and livened with carbonated water. Buttermilk lemonade is one of the best summer drinks we have, and buttermilk enlivened with charged water is delicious."

These are just a few suggestions of what could be served at such a bar. Others could be mentioned, everyone of which is a delicious, foamy, satisfying, healthful beverage that has been backed clear off the board.

Then the dairy bar could sell tasty sandwiches made from cottage cheese, cream cheese, neufchatel, pimento, club, or various kinds of nut or fruit cheeses made to order.

These would appeal to practically every man's appetite, and besides being highly palatable, they would be exceptionally nourishing to the body.

President Munn says: "When we got this idea we knew we were in for a great amount of educational work. The saloon man could not be expected to take our word for it that he could make more money selling milk than booze. We are going to try to teach him two things: The first thing is that he has been doing business heretofore on an artificial basis. Nobody who knows me would accuse me of being a crank prohibitionist. But I say it for a fact just the same, that the saloon man's business heretofore has been based pretty much upon the weaknesses of humanity. He has to turn about face in this particular. Of course, no man is going to stand up to a bar and make a hog out of himself drinking glasses of buttermilk or sweet milk products without number as he would beer or something else. It would be a lot more sensible, but he won't do it. But more men would come—more than enough to make up the deficiency. The dairy bar could be a real business, founded upon solid business principles and conducted the same way.

"The second thing we are going to attempt to teach the saloon man is the great number of ways in which milk can be utilized for drinking purposes.

We have been giving earnest thought to this for a long time. And I may as well admit while I am about it, that an inquiry we received from a New Hampshire saloon man is responsible for much of the development of this idea. He wanted to know some new ways in which he could utilize milk to serve his patrons. We experimented and found quite a number."

And the one hundred per cent healthfulness of these drinks can not be controverted: Milk is the one perfect food.

Mr. Munn is quite sure that no great difficulty will be encountered in educating the business man, and the laboring man as well, into the use of

oon and the saloon restaurant is built on an intimate knowledge of what pleases men. The saloon man is in a strong position so far as selling something to men is concerned.

And the profits he will make from selling a glass of buttermilk for ten cents will make the profits from a ten cent glass of beer look sick.

The entire campaign of the National Dairy Council is being planned on the basis that the dairy industry is not sold to the public and not even sold to those engaged in it to a large extent.

The need for encouraging greater production of milk is shown by the fact that while the country's population increased two per cent during the

prices still higher, to say nothing of the impairment of child growth and health caused by the lack of milk. Such action by the women is mostly due to lack of knowledge and for this lack of knowledge, says Mr. Munn, those engaged in the dairy industry are mostly to blame. The National Dairy Council is going to try to correct this. It is going to appeal to the public to increase the consumption of milk. Emphasis will be placed upon the fact that there is no substitute for milk and its products, and that milk, butter, cheese, and ice cream are protective foods indispensable to growth and health. Life is prolonged and many diseases avoided by a liberal use of milk and its products, and human welfare is conserved and national prosperity promoted by the development and conservation of the dairy industry.

Mr. Munn is enthusiastic over what can be accomplished in the council and he sees a great opportunity in this direction now that prohibition is an accomplished fact.

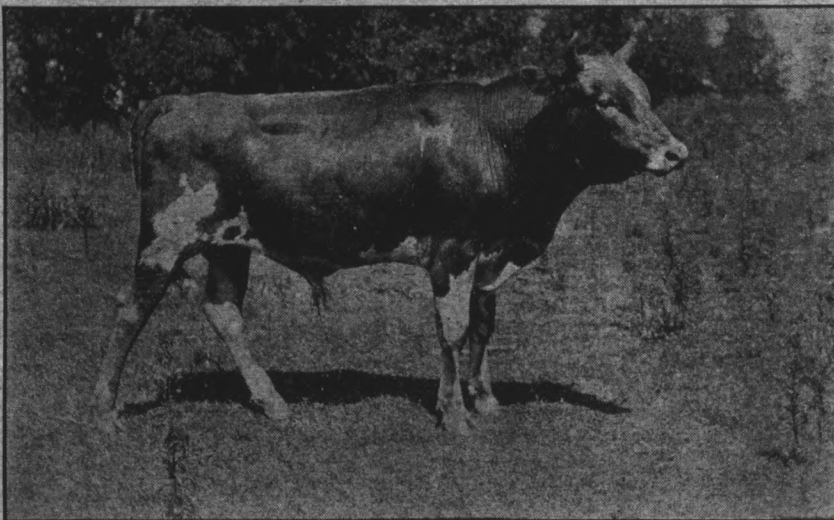
"I am sure," says Mr. Munn, "that not only the dairy industry, but the entire country is going to prosper under prohibition as never before."

If we can turn large numbers of saloons into dairy bars, and it is a certainty we can, it will mean a big thing in increasing the farmer's business, and in helping business in general, besides the increasing of people's efficiency as a result of using this healthful food.

People in general the country over are enjoying a period of prosperity. They have more money at their disposal than ever before and also it appears that with the agitation for shorter working hours, there evidently will come more time for recreation. People insist on amusement and places where they can spend their time and money. With the disappearance of the saloon there must come something to take its place.

The dairy bar and the soda water stand promise to be the ones to take the place of the saloon. Already the soda fountain is getting a strong hold in hotels and other public places. Its future seems a great one. Its development has been rapid, and in a year from now one will see great soda parlors equipped on a scale of elegance and luxury that will exceed many high-class cafes and restaurants of today. These parlors will be equipped also to cater to the lunch trade. They will be great recreation centers that will draw the public, and in these centers one will find not alone soda drinks and light refreshments and dancing and games of various kinds, but he will find dairy drinks as well, served in attractive ways, highly palatable, and pleasing to the taste. And dairy sandwiches with their variety and palatability, will find no minor place among the eatables, for the public will develop a strong appetite for these nutritious foods.

Work the mine of your own home. Dig deep into the affection of the wife and little ones. Spend more time in their company. Talk with them more. Read to them and listen while they read. Discuss the world's big questions with them. Precious metal here. And don't be too busy to get better acquainted with the neighbor young folks. The man who lives near to the heart of others, lives long, well and happily.



J. Barleycorn and Scrub Sires Belong in the Same Resting Place.

milk combinations for beverage purposes. Already the business man is learning that a glass of buttermilk does him more good than a glass of beer.

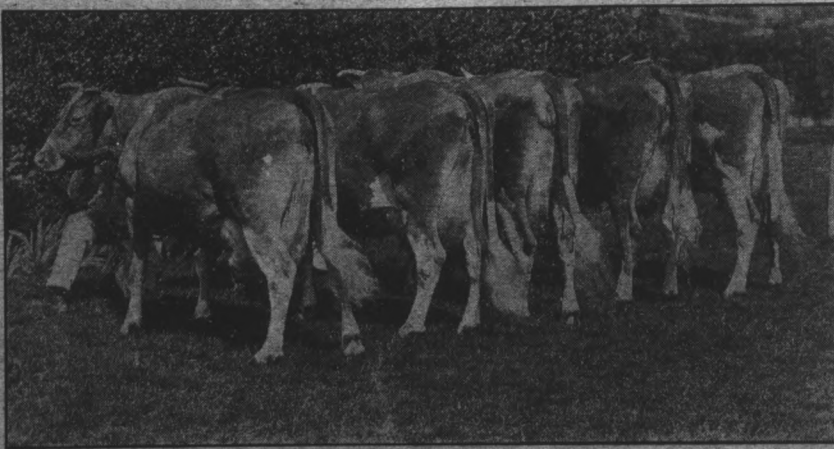
For years liquor has been gradually dropping into disrepute. Its friends and users consumed less and less of it. Prohibition came because the people who wanted it, got to be in the majority.

It logically appears that an organization having a concrete selling message is going to get results. Never was there a happier and more logical combination between product and potential demand than there is in this case.

The saloonkeeper, after all, is a man who possesses a big business asset in his understanding of men and his ability to cater to them in the way they like. In the first place, the average saloon is clean, while many a restaurant and soda fountain is not. The waiters in the saloon are courteous and efficient. The service in the sal-

The need for greater consumption of dairy products is evidenced on every hand. We see unhealthy children about us every day, and adults who are weak and incapable of the most useful life. "The dairy industry is more than a business," President Munn says. "It is an obligation which imposes almost sacred duties on those engaged in it. This is so because child growth depends on the milk of the dairy cow. We cannot have efficient men and women without milk and its products."

Many cases are at hand where various women's organizations and consumers in general have threatened to boycott milk and its products as a means of reducing prices. Of course, they have the best of intentions, but it is only evident that such action will tend to decrease production and make



Five Queens of the Dairy World.



# Nation-Wide Drive for Better Stock

**L**OOKING forward to the future food needs of this country's increasing population, the Department of Agriculture, in cooperation with the state agricultural colleges and other agencies interested in live stock improvement, announces a national better live stock crusade, to get actively into motion on October 1 under the slogan of "Better Sires—Better Stock."

The plan is to hasten the replacement of the multitude of scrub domestic animals in the United States with pure-bred or high-grade stock and also to improve the quality of pure-breds themselves. It has been evolved through long and careful observation of the live stock industry in this country and after extensive consultation with specialists and breeders.

For many years this country has domiciled thousands of the finest specimens of live stock in the world, but in spite of that fact the quality and productive capacity of the average farm herd and flock is still low. For instance, the average dairy cow in the United States yields only about four thousand pounds of milk a year, scarcely two-thirds the average production in some European countries, such as Denmark. The United States has thousands of cows which have milk yields of more than twelve thousand pounds—double the Danish average—but on the other hand it has hundreds of thousands which are kept for milk and yet yield only a small fraction of the product of the best cows, although receiving nearly as much feed and care.

The difference in milk yield is due in large measure to a difference in breeding, but a herd of low production can be improved rapidly by the use of a pure-bred sire from a family of high producers.

Among all classes of live stock a similar condition exists. Proper breeding of beef animals results in better and more uniform stocks, having a greater percentage of desirable cuts of meat and a smaller quantity of bone, offal, and inedible parts. Likewise in swine, sheep, goats and poultry production, the kind of parent stock very largely determines the quality and

market value of the products. The crusade for improvement now to be undertaken is the outgrowth of investigations in genetics, of live stock observations in many countries, and a close study of public opinion. In most live stock regions of the world a gradual evolution toward better live stock has been taking place for centuries. The rapidity of these changes has an important bearing on world commerce and on the prosperity of the nations, in which improvement has been greatest.

Individual and community efforts in many cases have resulted in marked live stock progress in small areas. The Islands of Jersey and Guernsey are familiar examples of this sort of accomplishment, but no large country so far has endeavored in an organized way to improve all its live stock simultaneously.

Officials of the Bureau of Animal Industry and others who have considered the problem from every angle are convinced that it is possible to hasten the natural course of live stock evolution with benefit to the nation. They are confident also that the live stock men of the country are eager to undertake the task.

The means of accomplishing most of the improvement—which affects about

two hundred million head of live stock besides poultry—will be through wider distribution and increased use of pure-bred sires and dams.

Once the use of pure-bred sires becomes general throughout the country, the process of grading up will be rapid. Many experiments and also practical experience, when good sires are used, show that within three generations most of the individuals in a scrub herd headed by a pure-bred male resemble pure-bred animals in appearance. In a few more generations, under skillful breeding, the former scrub stock is graded up to such an extent that for production of meat and other animal products, they are practically as useful as pure-breds. The chief difference between a "high-grade" animal and a pure-bred is in the value for breeding. Only the latter can be used in producing pure-bred breeding stock. Moreover only pure-breds are eligible to registry.

The Department of Agriculture through its cooperative state agencies is preparing to supply live stock raisers with printed information that tells in popular language the best animal breeding methods and the advantages to be derived from their use. In addition the department is to furnish an

official emblem, suitable for display, to every farmer agreeing to use only the pure-bred sires and in other ways to cooperate in the better live stock effort. To obtain the emblem a farmer or breeder will be asked to fill out a simple blank showing the number and kind of live stock he possesses and also to declare that all his male breeding animals are pure-bred. From the number and nature of the blanks received the department will be able to measure the progress of the crusade, and at the same time obtain valuable statistical information which will be made public at intervals.

The betterment of the nation's live stock is by no means a new idea. The topic has been discussed at length from public platforms and in the agricultural press for many years. Agricultural colleges, breeders' associations, live stock organizations, banking and business interests, live stock judges and experts—these and other forces are responsible chiefly for the progress already made and the sentiment for further development.

A general coordination of the work, however, now seems desirable, with a minimum of red tape and a maximum of red blood. So far as the activities of the department in the crusade are concerned, the Bureau of Animal Industry, in cooperation with the state colleges of agriculture, will be responsible for live stock policies, especially the breeding work and scientific problems. The States Relations Service of the department will work in cooperation with the colleges of agriculture for carrying the plan of action through the extension divisions to every live stock owner who can be reached. County agents and other field workers of the department and the colleges will be local sources of information and assistance.

While it is believed that stockmen of the country naturally look to agricultural officials to inaugurate a crusade of this kind, the problem primarily is one of adequate production and effective distribution. Responsibility for success depends accordingly on breeders and live stock owners.

For several months the department (Continued on page 251).



Hampshire Hogs Are Rapidly Gaining in Popular Favor.

## President Aitken Exposes Cole's Tests

To the Members of the Holstein-Friesian Association:—I had hoped to be able to wait until action had been taken by the executive committee or board of directors of the Holstein-Friesian Association before advising you of the status of the complaint against Charles Cole in testing animals for Advanced Registry.

This matter came to the attention of the writer at Brattleboro, Vermont, through a conversation with the man who has charge of testing for Advanced Registry in that state. This gentleman advised me that they had received information, from a source that was reliable, that Charles Cole had attempted to make a fraudulent record on a cow that he owned and was then under test in Vermont, through the injection of cream into the milk, and that acting upon that information the state of Vermont had employed assistance and had sent three men to aid in having a re-test made. The description conveyed to the Vermont Station described Cole as wearing a smock and overalls with a rubber bottle containing cream underneath the smock and a rubber tube extending from that down under his overalls, the tube being long enough to reach the pail when he was sitting over it milking. When visiting the farm Cole came to

milk this cow under re-test with smock and overalls, and when he started to milk one of the supervisors suggested that he remove the smock. Cole declined to do that by insisting that it was not necessary. They watched him closely and when testing the milk it tested two per cent less and was considerably less in pounds than had been the previous milkings. Cole declined then, for reasons he advanced, to make any further attempt with the cow, said that the test was off, and refused to continue with the re-test.

The writer then suggested that the gentlemen come with him to the board of directors who were then in session at Brattleboro and he told the same story to them. At his suggestion the Dean of the Agricultural College was asked to come and meet with the directors. He was advised by the writer, with the sanction of the board of directors, to go on and make his investigation and the Holstein-Friesian Association would pay the expense of it, that it looked as though with the information they already had that they would be better able to get additional information than any one else, that might, perchance, lead to further developments. It was agreed that the state would go on, employ whatever assistance was necessary, make a full

and complete examination, and report to the superintendent of the Advanced Registry and the secretary of the Holstein-Friesian Association at the earliest possible moment, that the board of directors or executive committee might take further action.

It was felt then that publicity or notice might interfere with getting any further information. There evidently were rumors afloat in connection with it and before either secretary or superintendent of Advanced Registry could get a report from the further investigations of the Vermont station, I received a telegram from the chairman of the executive committee that he had received a letter of great importance, asking if it would be possible for me to meet him in Cleveland. I went to Cleveland on Monday, July 28, when Mr. Reynolds, chairman of the executive committee, showed me a letter from Mr. J. Williams, of Sterling, Illinois, to the effect that he had information that was certain, of the most startling character, and went on at great length without giving names or any specific information. We concluded to have him come to Cleveland and telegraphed him. He came to Cleveland the next day and advised the chairman of the executive committee, and the writer, that upon

hearing the rumors about the condition in Vermont and still having full faith in Charles Cole, with whom he had made a contract to test for him, he telegraphed Mr. Cole to meet him in Buffalo and he met Mr. Cole in Buffalo. Mr. Cole had with him his brother-in-law, Mr. Crawford.

During the conversation Cole admitted to him that he had been making some large fraudulent records and when Williams showed his astonishment Cole went to considerable length into the different animals that had made these records. Now the chairman of your executive committee and the writer had the rumors and partial reports from the Vermont station, had a report from Mr. Williams that he had talked with Mr. Cole when there were present only Mr. Cole, Mr. Williams, and Cole's brother-in-law, Mr. Crawford, and it was then deemed advisable to call a meeting, by telegraph, of the executive committee, for the fourth and fifth of August at Chicago, and at the same time the chairman of the executive committee should go with Mr. Williams and interview Mr. Cole, find out just what he was willing to tell and what he had to say in relation to the tests that he had been making, and any other information.

(Continued on page 253).





## Getting Ideas First-Hand

By J. H. Brown

**K** NOW anything about the septic tank business?"

"Yes, a little bit. I read about it in the Michigan Farmer, and once heard a farmers' institute lecturer tell how to make one. But I didn't get it all in my head so I could go at it and make one."

"Well," continued the first farmer, "my wife has been at me for quite a spell to put in a water system and bathroom. And she says it's no big job to put in a septic tank, and that if I don't get at it pretty soon, she will. So what am I going to do about it?"

"Oh, well, maybe she's just bluffing you. My woman does it often, I can tell you, and I've got kinder used to it. Women have to talk about so much, anyway."

"Mine don't. She ain't no bluffer! She acts, and she's some actor, too, when she gets started. And she's mostly right about it. And that's why I've got to find out all about this septic tank business."

Another neighbor drove up in his car at this moment and noticed the two farmers talking and gesticulating. He handed out a circular to them.

"Good morning, neighbors! Here's a notice of the big St. Joseph county farmers' observation tour and picnic. It's under the auspices of our county farm bureau, and county agricultural agent, J. M. Wendt, is at the head of the big doings. We will drive through certain portions of the county and visit farms where we can actually see things being done in the way of progressive and profitable dairying, live stock breeding, the way to make poultry pay, see tests in fertilizers on different soils, see what's being done on a big muck farm in growing crops, look into one or two modern farm house kitchens, and find out how to make a septic tank for disposal of the farm house sewage." And off the energetic farm bureau member sped on his way to stir up other farmers.

"By golly, Jim! Did you hear what he said about septic tanks? I'm going right in and tell my woman about it. Here's right where we find out all

about how to put in one o' them god-darned tanks, see if we don't." And off he rushed into the house.

And that is about the way it started. So many farmers received circulars and heard in one way and another about the stunt Mr. Wendt was putting on that, when the morning of the fifteenth of July hove around, there were farmers and their wives and sons and daughters in their automobiles, with baskets full of eating stuff, lined up in Centreville, enough to make the longest circus parade you ever saw this side of kingdom come.

It was a new kind of farmers' institute, held in the good old summer time when all sorts of things were doing on the farms. Instead of listening to some institute lecturer around a big stove in some hall, as we used to do years ago, these farmers had a great day traveling speedily from one township to another and saw with their own eyes the things they had read and heard about and doubted, like Thomas of old times way down east.

And there were several farmers and their wives who found out all about septic tanks and how to install them. Other farmers were led straight into more than one kitchen that day to see how some modern improvements could be put in that would save steps and be mighty handy. And these farmers' wives acted as second lieutenants on this job. There is no doubt about St. Joseph county having about a score or more septic tanks on as many farms before the old moon has waxed and waned many times more. And county agent J. M. Wendt and the farm bureau will be to blame for it.

This was the third observation tour of the county by the farm bureau. And it was the biggest one of the kind ever held in Michigan, so far as we know. The attendance was double that of last year. There were over one hundred automobiles in line and more than five hundred people.

The tour proper was arranged by Mr. Wendt and Miss Laverne Jones, who is home demonstration agent of that county. Both were assisted by

(Continued on page 244).

# "It's all done - and no real work about it!"

"Just an hour's interesting experience in operating a most wonderful machine that does both the washing and wringing. All the hand work required was feeding the wringer and hanging out the clothes.

"I'm glad all through that I can do my own washing, independent of unreliable servants, and get a lot of real pleasure out of it besides.

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# State Holstein Breeders' Picnic

*Ideal Weather and Interesting Program Bring Out Large Attendance*

EAST Lansing was bathed in sunshine to greet the members of the Michigan Holstein-Friesian Breeders' Association, Saturday, August 23. From ten o'clock until noon a stream of automobiles from all parts of the state continued to pour enthusiastic black and white breeders and their families onto the beautiful Michigan Agricultural College campus.

In spite of the fact that reports of certain fraudulent seven-day tests threaten to give the owners of certain animals a severe jolt, a general feeling of optimism pervaded the atmosphere; the majority of the breeders present, feeling that while a few breeders and speculators might suffer from the revelations made by Cabana's man Cole, regarding practices in testing certain cows, the rank and file of Holstein-Friesian breeders of the country will eventually profit therefrom and in the future will think more favorably of their twenty-five and thirty-five pound cows than has been the case during the past few years.

The Holstein-Friesian breed of dairy cattle occupies a position more secure in the hearts and minds of American farmers than any one man, especially a self-confessed fakir, and none of us have reason to doubt the sincerity of the efforts of President Aitken and the members of the executive committee of the American Holstein-Friesian Association to throw out every record that is in any way clouded with suspicion. One thing is sure, the breeders of black-and-white cattle who are in a position to continue the making of credible records will find a profitable outlet for all of the surplus animals they can produce.

Prof. A. C. Anderson, the dairyman's big brother, explained how the college has come to know and understand the black-and-white breeders of Michigan through cow-testing work. While we have heard some unfavorable comments regarding cow-testing work in other states, Prof. Anderson advised every breeder to withhold all judgment before hearing all sides of the case.

In discussing the cow-testing work in Michigan, Prof. Anderson said: "We are willing to stake our reputation upon the reliability of the records made by Michigan breeders. In the past eight years of our work we have discovered on an average of one attempt at fraudulent practice a year and I am glad to assure you that none of these attempted frauds have ever slipped by. We have at various times examined men to prove to our entire satisfaction that they carried no concealed weapons, if you please. We have at all times used our discretion in making such things public, realizing that false practice, or deception, on the part of some one man should have no influence in creating suspicion that other men were attempting or practicing fraudulent methods. In all instances we have meted out a just recompense for such work, and I want to say to you that I am perfectly willing to stand back of any records made in Michigan. I am going to see that every bit of precaution that the state of Michigan can exert is made in keeping our cow-testing work above suspicion."

"Any man who breeds other dairy cattle who gets up on his feet and makes capital out of this unfortunate occurrence is walking on dangerous

ground. One thing I do want to say, and that is that I know of two cases where such practices have been attempted as a result of owners of breeding farms offering big inducements to men who have been conducting their cow-testing work. The system of offering bonuses has grown up I know, but it is all wrong, and I hope that none of our breeders will offer too great temptations to the men who are doing their testing work. In the two cases we have had in Michigan the men who had a part in the work have been put out of the business. I am sorry to have brought from the closet the family skeleton, and now let us put the skeleton back into the closet and close the door."

Hon. J. M. Hackney, owner of Arden Farms, of Minnesota, congratulated the people of Michigan upon the Agricultural College and its beautiful campus. "Men," said Mr. Hackney, "would be dead within themselves if they did not get inspiration from such institutions as these. I well remember the hard struggle we had in Minnesota to get the hard-headed old farmers to understand the purpose of our work. As a representative of the people of the state on one of the important agricultural committees of the senate my theory was that we had to get the knowledge of the instructors at the college across to our people. I suppose you have faced the same problem here in Michigan."

"Some of our old farmers resented our efforts to put out our ideas through the young men we sent out from the college. Our results have been so great, however, that we now are able to put this knowledge out into the different parts of the state where it is doing the most good."

"These picnics are splendid things and I wish that we might have more of them, for they help to inspire country people and give them a much better impression of their business. When you think of these old pioneers do you not feel like taking off your hat to them for making it possible for us to be here and also the black-and-white cows. We people in the west look upon Mr. Aitken as the Governor Hoard of the United States so far as the Holstein-Friesian breed and the dairy industry is concerned."

"The Holstein-Friesian Association has demonstrated its power as an organization during the war and the one thing for us to do is to strengthen our organization and put over the problem of producing more milk and butter. Some of us doubt where we stand after reading the reports of this man Cole's work, and listening to Prof. Anderson, and I thank God that we have the men in our organization who will sift this thing to the bottom and kick out the guilty parties. We shall expunge from the records any cow under suspicion, no matter whom it hits. When I heard Cole's confession I went home and said I am going to look my cows in the face and know that their records are true. But giving \$2,000 for any one test is too much. I believe Mr. Cabana is an honest man and I

look upon him as a broken-down man as the result of this investigation. I want you all to reserve judgment until we can get the real facts of the case."

"Agriculture is based upon what it can produce, and show me any farmer in Michigan who is happy and I will show you a man who is prosperous. I believe that the dairy industry is the greatest industry of all. It is cash every month, it keeps the soil fertile and while it is hard work it keeps the boys and girls on the farm. Of our cows it is the average cows we want to bring up. I don't advocate 1,000-pound-a-year cows as a basis, but I do want to see you raise your present average from where it is. A raise of fifty pounds of butter per cow per year in Michigan would mean an increase of nearly \$18,000,000 to the income of the farmers of the state. I don't want you to all get pure-bred cows, but for Heaven's sake get a pure-bred sire. Any man can figure out in his head the value of a pure-bred sire. It was the result of using a pure-bred sire that caused me to break into the game of breeding registered Holstein cattle. I would be ashamed if you people in Michigan could not show a higher percentage of pure-bred dairy sires than the people of the great dairying state of Wisconsin, where only twenty-two per cent of the dairy sires are pure-bred."

"When I listened to Cole testify at Chicago I went home and shook hands with my twenty-pound cows. Forget about these forty-pound records for the lower producers are the ideal dairy cows. Annual records are sweeping over the country and they are sure to replace the seven-day records as a basis for selecting high-class dairy sires. Seven-day records are necessary for men who can't afford the longer ones, but in selecting sires get them from ancestry that have good yearly records. There will always be a good market for good cattle and there is no end to the market for pure-bred Holstein cattle. In all the big farming communities every farmer is realizing that he must sooner or later intensify his farming and raise dairy cattle, hogs and small stuff. Foreign orders are not needed, for we cannot begin to supply our American demand. If you can't find a profitable market for your whole milk you can sell the cream and feed the skim-milk to the hogs."

Particular interest centered in the address of President D. D. Aitken who spoke as follows: "These are strenuous times in this country of ours and there has never appealed to me the need of greater economy and courage than now, and I want to tell you that it is a great deal easier for some of you than it is for me. We are irritable and nervous and not a soul of us knows what is coming to us. Some of our politicians claim that they can tell us and will tell us, more before election. Some of them will tell us the packers are the cause of the high prices of foodstuffs, but last year I decided to feed a few hogs as a matter of patriotism and when they were ready for market I called up my butcher in Flint and told him that I had a nice

bunch of corn and milk-fed hogs for sale. He offered me \$18 per hundred for them after they were dressed. The same day in Chicago the packers were paying \$18.60 on foot. So I wonder if it would not be a good thing if we had a few packers in Flint. And this is about the way a lot of this bunk about who is to blame for high prices is passed along to the people. Economize and pay your debts which you can get the money. Have courage and economize. We must all realize that the conditions that exist today never before existed in this country. The very atmosphere is impressed with a hazy unrest and men who are making \$10 to \$12 a day are dissatisfied with their condition. You on the farms are not stirred up so much by this unrest."

"You people are soon going to realize that if your boys are going to be proprietors of their own business they must be proprietors of a farm, for every industry is being managed by hired help. You must also realize the need of better machinery and better live stock for you cannot withstand such tremendous losses as you are now suffering."

"A few months ago when the farmers were being paid the government price of \$2.25 for their wheat, bran and middlings were selling for from \$27 to \$35 per ton. Wheat is now \$2.05 and bran and middlings are selling from \$50 to \$60. Have any of your bunko steerers attempted to remedy this condition? I have heard cost plus until it gives me the St. Vitus dance and I want to tell you that if you are keeping scrub cows you are creating a greater cost than you are entitled to receive compensation for. We have got to demonstrate the efficiency of the Holstein cow as a producer so we will be in a position to keep cost of production costs within reason when we are called upon to state our case."

## NEED FOR FARM TRACTORS.

CABLEGRAM to the Department of Commerce from Consul George Horton, at Smyrna, Asia Minor, states that there is an extremely promising opportunity in that country for American manufacturers of agricultural machinery.

"The Greeks are very enterprising and need machinery," says Mr. Horton. "Their security has been established in a mandate of their country. For the first time in history tractor machinery will immediately come into general use."

"The country of Asia Minor is a wonderful field for agriculture implements, as large tracts await the plow. Great Britain has an agent already there. A farm of twenty thousand acres is owned by an American citizen on a railroad seventeen miles from Smyrna. Part of this farm could be utilized as an experiment station for tractor and other machinery."

"Tractor implements are being sent to the Salonica region with instructors to teach the natives to operate and repair; this should be done here."

"I am informed by the Greek government that it is willing to pay for tractor machines sent over for introductory purposes; and also that they will place an order for twenty-thousand-horse or ox-power plows, to be used by Turkish and other refugees when they return to their farms."







## The Dairy Problem

By E. L. Vincent

At a meeting of dairymen held recently in a city in the southern tier of New York counties, a dairyman made the statement that it costs twice as much to buy a cow now as it did a year or two ago, adding, "you can't buy a good cow now for less than \$150 or \$200." At the same meeting another farmer spoke about the high price of hay and ground feed, asserting that he was feeding then, about the last of July, as heavily as he did in the winter, because of the short pastures, and concluding, "we can get \$30 a ton for hay. Why not sell off our cows and market the hay?"

Now, this smoke from the dairy shows where the fire is. We have more than a rumbling from all parts of the dairy field; it is a distinct thunder peal, and it means that if things go on as they are now going, one of two things will happen. We must get higher prices for milk or the cows must go to the shambles. A young farmer said to me a few days before the meeting above referred to was held, "I am going to write a letter to the Dairymen's League, telling them that we must have a higher price for milk. We cannot otherwise keep our heads above water." And this is absolutely true.

Can higher prices be established at present? If established can they be maintained? These are questions that can be answered only by future events. Still another question would naturally follow: "How will the consuming public take it if the price of milk is pushed still higher? Have we not come to the limit?"

It is prophesied by some thoughtful men that we are near to a day when the consumers will rise up and demand milk prices that shall be within the range of their ability to pay. When they do this and take the distribution of milk into their own hands, we shall see better times both for consumers and producers. Well for all if this revolution can be brought about in a sane and sensible way, as I believe it can be, by all interests concerned sitting down together and threshing the problem out. Then dairy farmers will receive more for their milk and consumers will not be compelled to pay as much as they do now. What will become of the dealers and distributors? They will double up, so that fewer wagons will be traversing the streets, a smaller number of men employed, and expenses generally lowered.

But what concerns every dairy farmer more directly is the effect upon our farming lands if we go to the extreme of selling off our cows and relying upon the sale of hay for our revenue. Here is a serious proposition and one which if carried to its possible conclusion can mean only one thing, and that the rapid deterioration of meadows and tilled fields everywhere if such a system is adopted.

In the section where I live, I now and then pass a number of farms where the plan has been tried out of disposing of the cows and depending on the hay crop for the living. These were once prosperous farms. The pastures were dotted with cows. The homes were comfortable. Barns were tidy and the fields well kept up. Today the houses are vacant. Most of

(Continued on page 250).

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(Signed) H. D. ROSS & SON.  
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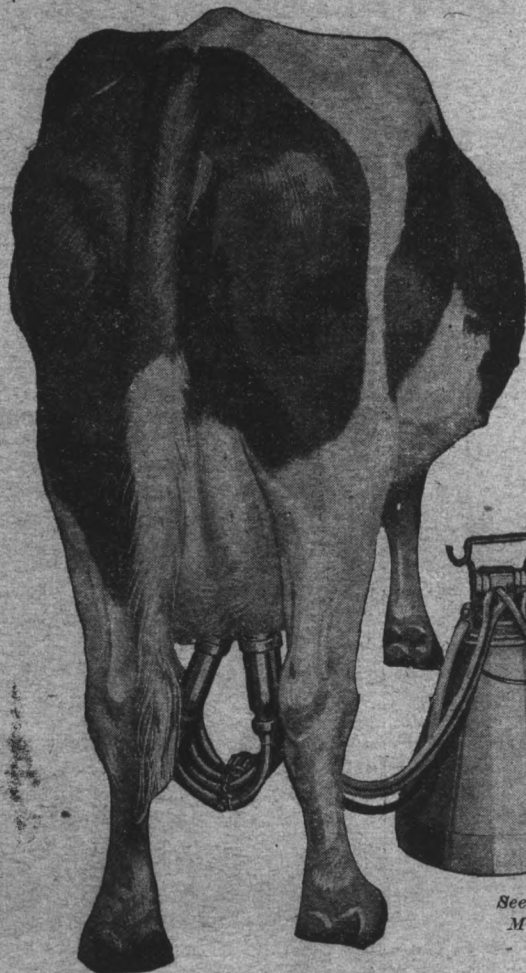
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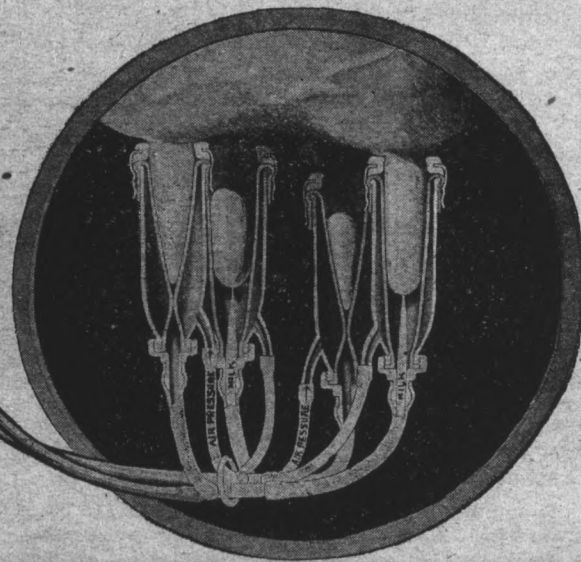
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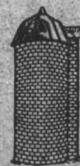


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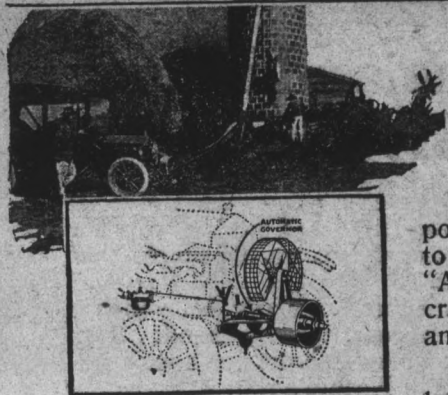
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## Practical Storage Notes

By I. J. Mathews

WHEN a little straw and more soil shaped with a trifle of elbow grease will beat both the iceman and the groceryman, it is time to take notice. I know what it means to pick parsnips out of the frozen ground, and I have participated in proceedings that were more to my liking. In that, I was not alone. Practically all products of the garden and field can be kept in a simple and inexpensive storage that may be constructed on any farm. Heretofore, only the hardy products have been thus kept but the occasion demands that everything that can be preserved in storage be kept.

There are a few principles of storage that must be borne in mind when planning the storage of any product. An even, low temperature must be maintained if possible, the product must be packed so that air may move about from place to place and the amount of moisture must be maintained at a high point. Storage pits or cellars not provided with ample moisture account for so many shriveled and soft potatoes, apples and other products. The demands for moisture are not the same, however, for all products. While potatoes, beets, carrots, and cabbages keep best where the moisture is abundant sweet potatoes, onions, squashes and pumpkins are at their best only where the amount of moisture in the air is relatively low. So while the cellar may be suitable for storing potatoes and the root crops the attic gives more ideal conditions for the storage of onions, squashes and pumpkins.

As in canning, it is impossible to take prime stored stuff out of storage unless prime stuff was put in. When the fruits or vegetables are placed under low temperature conditions, the ripening process is simply delayed and it is carried on much more slowly from that on. For instance, we will take apples that should be ripe in another week if the weather continues at ninety degrees F. throughout the day. If these apples are cooled to a temperature of thirty-five to forty degrees, it can be readily seen that their maturity will be much belated. In order to keep the longest, apples should be kept under the same temperature as much as possible. Accurate records show that any storage product decreases in value more rapidly if the storage temperature is allowed to change very much. Even temperatures keep the ripening checked and moisture in the air keeps the natural moisture of the product from evaporating.

When fruits and vegetables are packed either in bulk or in containers so that the air cannot circulate freely, there is bound to be trouble. Moisture laden air settles into the pockets and then the temperature there has a tendency to rise a little and between these two facts, molds, rots and decays set in. I have removed sacks of potatoes from the storage bins and found the potatoes decayed the most around the outside of the sack where it came in contact with another. Pack the products so that air can have free access to all parts of the bins and storage places.

There are very few farmers who can afford to build and maintain a regular storage house unless they have specialized and have but a single crop to store. Out-of-door pits, root cellars and underground cellars are the most practical for farm use.

The out-of-door pit has and will save

many millions of dollars worth of farm produce. May it also be said that many millions of dollars' worth of stuff has also gone to waste in such pits. Potatoes and apples for early spring use or sale may be easily and safely stored in these field pits. Turnips, rutabagas and beets may be stored in these pits, but if they must be used during the winter, the piles should not be made too large so that the danger of freezing while some are being removed is obviated.

Properly made, the field pit is a friend in disguise. The error often made is in thinking that pits for all products should be the same. As a matter of fact, potato pits should be warmer than the others. If potatoes drop below thirty-five degrees in storage, they take on that sweet taste which is relished by but few in potatoes. Hence the pit temperature must be kept between thirty-five and forty degrees F. for quality potatoes. Put the pit on a well drained location, heap the potatoes on the pile, cover liberally with straw. Then put on six inches of dirt. Now another layer of straw covered with from six to nine inches of soil completes the potato pit and if these details are carefully followed out most fall potatoes should keep until spring in good condition.

For the other root crops and apples, the second layer of straw does not matter so much. They can stand temperatures pretty close to the freezing point. Parsnips should be laid out to freeze before they are put into the pit. Vegetable oysters and salsify should also be treated in the same way.

Cabbages may be stored in a pit but I find it some easier to put them into or remove them from a trench. My way is to dig a trench about eighteen inches deep and a foot wide. Put a layer of straw in the bottom of the trench. Leave the roots and leaves on the cabbage and put it into the trench, roots up. Then put a layer of straw in the trench but above the heads and cover the rest of the pit with soil. Cabbages keep well in this long pit and may be easily removed when needed for the table.

Root cellars are very desirable if built with a ventilator. The trouble often is that the ventilator already on has been nullified by having a board put on top of it. This shuts off the air circulation and causes the stored materials to ripen more rapidly since the heat of the root cellar is not allowed to escape. Root cellars ought to be watched carefully and ample ventilation provided at all times.

Many house cellars are too dry for the storage of root crops, although these same cellars do well for onions, squashes or pumpkins. Moisture is absolutely essential and must be provided in some way. Of course, there can be too much moisture. When it collects on the potatoes, apples or other materials, then there is too much. Cellars often suffer from lack of ventilation and it is a good plan to open a ventilator or window from time to time to let off warmed and foul gases.

There is scarcely a farm product that cannot be successfully stored. Moreover, suitable storage is easily provided and seldom involves a financial burden. Let us store more this year than ever before, since some of things we have ordinarily procured from outside sources will not be available this year and it will be necessary to make the farm-grown products take their places.



## GREEN FEED FOR HENS.

NOTHING in the hen's ration is more important than green feed and it is especially important in winter. In the early fall it is best to plan on the winter's supply and take a chance on overestimating the amount needed rather than underestimating it. If the mangels have not done well, or if only a few were planted, it pays to start a late crop of turnips. Hens do not seem to like turnips as well as mangels but they will do for green feed when other materials are lacking.

Mangels are the best winter green feed and a large amount of them can be grown on a small space. Sprouted oats are greatly relished by hens, but it is some work to prepare them and oats are expensive, so many poultrymen will find that they can get along very well by using mangels and leaving out the sprouted oats. Plan on a supply of cabbages if the mangel crop is short and then feed the cabbages first and save the mangels until late in the winter as they will keep better than cabbages.

Pumpkins are liked by poultry and we find that the crop of pumpkins will not bring much money on the market and they are a bulky crop to deliver. It is much better to feed them in the winter to the hens and market them in the form of fresh eggs. Boiled pumpkin mixed with bran is a healthful food and very good for forcing the young stock or keeping the old hens healthy while confined in the laying house.

Clover is one of our best poultry feeds. It may be rolled in a cylinder of poultry wire and placed in the house where the birds can pick at it. Clover can be soaked in warm water to freshen it and then placed in the poultry house in troughs. A fork of clean clover hay thrown on the floor of the house will keep the birds busy while they are confined during the winter or on stormy fall days.

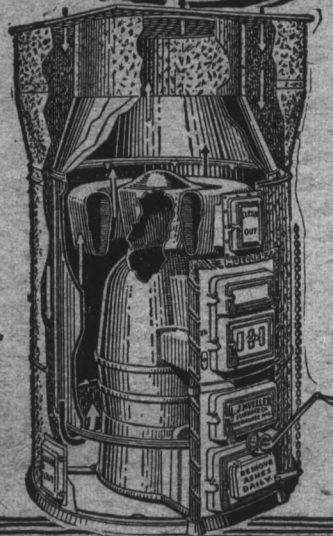
Save all of the cull vegetables for the poultry. They can be boiled and fed in the form of a wet mash. Such feed is so much better than a straight grain ration for fowls that no flock should be without it. It tones up the birds during the winter and helps them to lay eggs. Even if the cost of eggs in winter is about the value of the eggs, the hens have to be fed something so why not give them all they need and get paid for it rather than half feed them and receive nothing for what they do get.

We have found that a few feedings each week of boiled cull potatoes are relished by the birds and it helps to reduce the cost of feeding them. At the present price of potatoes they are not economical poultry feed but there are apt to be many unmarketable culls especially after a dry season, and they can be used to advantage in the poultry mash. If there is a vegetable grower in the community some poultrymen can do well to purchase any of the cull stock which he is glad to get rid of at a very low price. Often farmers in the community raise crops of carrots, mangels, turnips or beets which do not find a ready sale on their local market and sometimes the poorer grade can be purchased by the poultryman at a price that makes it an economical investment.

One farmer in our section fed silage to his hens and they seemed to like it and it had a good influence on egg production. It might pay if some of our experiment stations would find out the value of different kinds of silage for poultry feed. The poultryman and farmers with large flocks need a cheaper source of feed and it seems as if some kind of a chicken silo might be used to advantage. Clover silage ought to be a good green feed for hens though the writer has never seen it used.

R. G. K.

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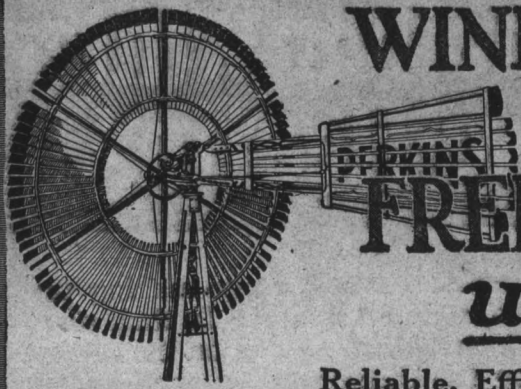
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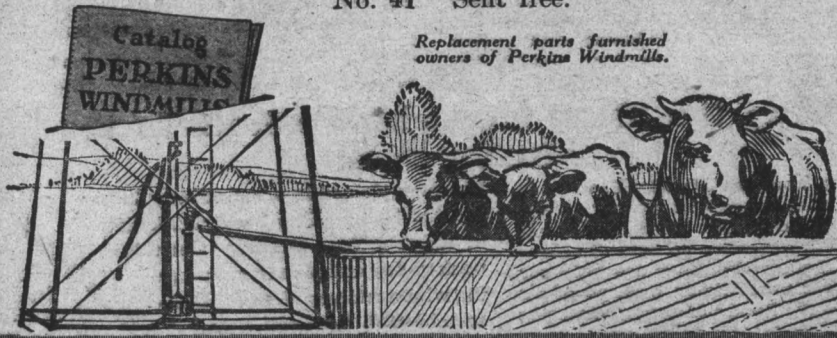
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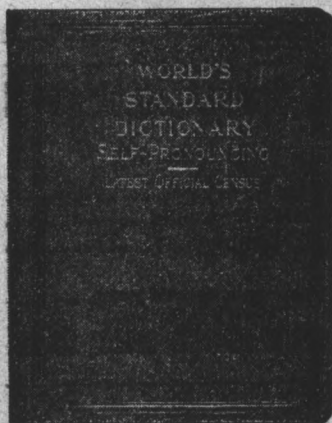
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Ionia Co.

C. F. B.

One farming on shares has no right to anything other than the crops produced by his annual labor in the absence of greater rights explicitly given; and it is not believed that the expression above quoted would give the further right to trees before planted.

JOHN R. ROOD.

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Alcona Co.

C. W. G.

In this section, Missaukee county, sweet clover appears to thrive when other clovers fail. On my desk now I have a letter stating that of thirty-five acres seeded this spring on one farm, only five acres which was seeded with sweet clover has survived. This is a gravelly loam soil, unlimed, but the seed was inoculated. It had not grown this crop before. The other thirty acres of medium, mammoth, and alsike came up but were not able to withstand the dry weather and grasshoppers. All of the seedlings were made in oats. The writer of the letter says that he is convinced that sweet clover or alfalfa, with their deep roots, are the best hay crops for this type of soil.

In reply to the above inquiry I would surely advise a trial with sweet clover. Sow the fall rye a little lighter than usual. Lime the soil if convenient, but an application of two hundred pounds of acid phosphate per acre will greatly help the rye and make a very noticeable difference with the clover. Sow the inoculated sweet clover in the spring early and cover by the use of a harrow. Early spring seeding on a firm seed bed, using inoculated seed, seems to give the most satisfactory results. The first crop the second spring should be cut early, before the blossoms appear, and it should be cut high enough so that two or three live buds are left on the stubble. This summer I have seen beautiful stands of sweet clover killed completely by cutting too low. The second crop is usually saved for seed. With the exception of the manner of cutting the first crop, sweet biennial clover is handled exactly like medium clover. It is a biennial and, like medium clover, fits nicely into a three-year rotation. H. L. BARNUM.

### PERMANENT PASTURE ON MUCK LAND.

I have some low mucky ground that I wish to seed for permanent pasture and will you tell me what is the best mixture of seed to use for this purpose, and when is the best time to sow it?

Newaygo Co.

A. L. B.

There is no better time to sow grass seed, either for meadows or permanent pasture, than early in the spring, but if it cannot be sown early then I would prefer to delay the seeding until

late August or early September to avoid the possibility of extreme heat and dryness during the middle of the summer.

A good mixture of grass for a permanent pasture on this land would be timothy, alsike, clover, red top, orchard grass, and tall meadow oat grass, and it is always advisable to seed heavily, fifteen to twenty pounds of seed, enough to make a thick, heavy sod is considered advisable rather than a less amount. Usually June grass is present so it will come in of its own accord in a short time, but on this muck land it might be advisable to add this seed also.

C. C. L.

### WORKING OUT HIGHWAY TAX.

Can we work out our highway tax, or must we pay it in cash?—W. H. R.

Under our present state laws, highway taxes must be paid in cash, just as any other taxes. Of course, people may get a chance to earn part or all of their highway taxes by getting a job from the highway commissioner or the county road commissioner as the case may be, if the commissioner is willing to employ them.

JOHN R. ROOD.

### WEAK PEKIN DUCKLINGS.

I have full-blooded Pekin ducks; they commenced to lay the middle of March, seventy-three eggs in all. As soon as I had a setting I would set them. They hatched well, never saw anything grow as those ducklings did. Those hatched first are all feathered out and weigh about three pounds. The second ones, however, are just where the feathers are starting, and they seem weak in the legs, have to rest every little way, and if one gets on its back it has to be helped up or it dies. They weigh from one-half to one pound each, just a pity to see them and not know what to do for them. I have lost fifteen. They have free range, fresh water, oyster shell, charcoal. Feed one part bran and two parts coarse corn meal wet with sweet skim-milk, feed three times a day. Please tell me what ails them and what to do for them, and is it anything that the little chicks will catch, as they all run together, only feed in separate pens. The ducks are shut up at night in coops having screen front and board floor. The coops are cleaned out once a week and disinfected. Have five ducks that can hardly walk, but eat good, seems to be worse at morning and night. Do you think the heat affects ducks?

Van Buren Co.

J. F. B.

An excess of concentrated food and a lack of exercise may result in leg weakness. Try a mash containing only about fifteen per cent of the corn meal and the remainder bran. Add plenty of green food, such as clover or green rye to this mixture and also ten per cent beef scrap and five per cent coarse sand. Only feed the amount that the birds will clean up in a short time. Possibly the breeding stock was more vigorous when the early eggs were produced and that is responsible for the quality of the early hatched stock. Heat may effect ducks but poultrymen seem to find that after ducklings are a week old they will stand quite a little more heat than the young chicks. Vertigo or dizziness may occur during hot weather. It is often due to poisons in the intestinal tract, or intestinal worms. Young ducklings hatched during the summer may be weak because of errors in incubation. The eggs need plenty of moisture. Eggs that are overheated often develop into weak birds.

By balancing up the plant food in the soil the amount of labor required for a bushel of any crop is reduced.

In purchasing commercial fertilizers consider the cost of the crop to be grown as well as the price of the fertilizer.



## FORECLOSURE OF MORTGAGE.

We bought a place two years ago, paid cash for it, but received no deed. A man that used to own it has foreclosed his mortgage on it. Can he put us off? M. H.

This looks like a case where failure to examine the record before buying has cost the buyer his purchase price. If the mortgage was of record when this man bought he took subject to it. He would also take subject to it if he knew of it, though it was not of record, and the purchaser at the foreclosure sale can oust him by a writ of assistance. But if it was not of record, and M. H. had no notice that put him on his guard, or inquiry before he bought and parted with his purchase money, his possession would amply protect him against any subsequent acts; and though he has obtained no deed, he could still obtain due conveyance by suit in chancery.

JOHN R. ROOD.

## LINE FENCE.

I have a line fence to build. The land opposite mine is brush not used. Am I obliged to build the whole fence? C. E.

The law does not require the owner of land to fence it if he is not using it, and if the adjoining party wants to enclose his land he must build the fence. But the moment the adjoining owner starts to use the land, the man who built the fence and owns the adjoining land can compel him to pay for half of the fence. JOHN R. ROOD.

## BETTER DRAINS AT LESS COST.

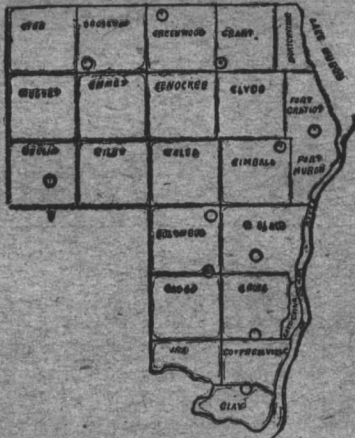
(Continued from page 227).

of ten men in China township, St. Clair county, has already organized and is ready for business.

## Returns Certain.

"While we do not expect the benefits from drainage to show immediately," says Mr. Robey, "in many cases two crops will be sufficient to pay for the cost of installation, and in case of a wet and unfavorable season one crop will often be enough to pay for the entire cost of the drainage. There will be no better land anywhere than that in St. Clair, after it is drained."

Financial backing for drainage work is quite readily obtained, for bankers realize the value of the work. One banker in a section of the state where considerable drainage has been done,



St. Clair County, Showing Location of Twenty-acre Tracts Being Worked in Drainage Project.

recently remarked: "We have had such good returns from the loans for drainage work that we are ready to finance anyone where drains are being put in under competent supervision."

## Demonstrations Held.

What is probably the first public drainage demonstration day ever held in Michigan was held recently on the farm of Hiram W. Shaw, near Marine City, in St. Clair county. Another was held in St. Clair township on August 15, and future demonstrations, not only in St. Clair county but in other parts of the state as well, will give the farmers of Michigan a chance to see at first hand the actual working of machine-installed drainage.

## Its Savings Pay Its Way

The savings which Lalley Electric Light and Power makes, in money and time and labor, actually do pay its way on any farm.

We make this statement, not on any say-so of our own, but entirely on what Lalley owners tell us.

Right now the opportunity to save by installing the Lalley without delay is greater than it ever was before.

It will pay you to see the Lalley dealer at once, and learn why farmers are buying Lalley-Light at the rate of almost 1000 plants per week.

No farmer, we believe, has ever considered Lalley-Light a downright expense.

Most of our owners possibly installed the Lalley primarily for its comforts and conveniences.

They figured that these advantages more than offset the investment. And so they do.

But these men soon discovered that electric light was only one of the benefits of Lalley ownership.

They had an ample supply of electric power. They turned it to use in churning and cream separating, fanning out grain, and other light work about the barns.

Their women used it to sweep with suction cleaners; to run the washer; to do the ironing in less time.

Then the Lalley savings began to show. The men could begin the day earlier, and do more after dark, because of the fine light.

Certain tasks were done in a third or a half the time they used to take.

So the preference for Lalley grew greater and greater, until now, as we have said, it is expressed in sales of close to 1000 plants a day.

The least you can do is to see the Lalley dealer at once.

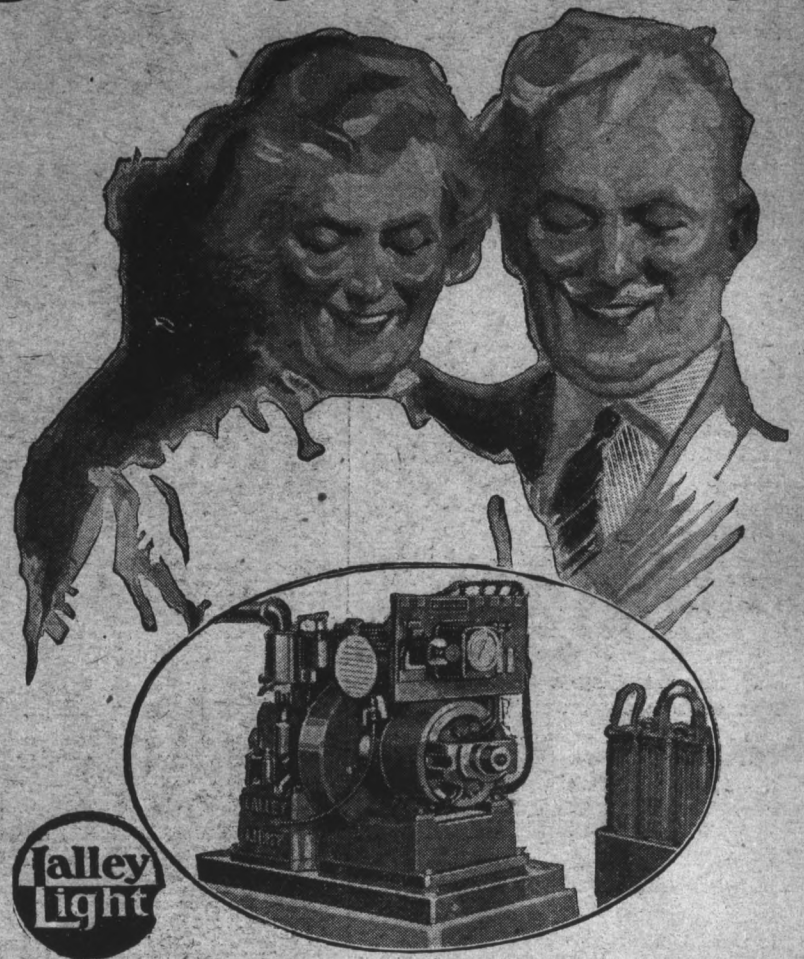
It is actually true that the Lalley will begin to save for you the day you put it in. Therefore you can't afford not to have it.

Go to the Lalley dealer now, and he will install the plant without undue delay.

## Lalley-Light Corporation

783 Bellevue Avenue

Detroit, Michigan



See the Lalley-Light Exhibit in the Machinery Building at the Michigan State Fair—Detroit—August 29th—September 7th

Lalley-Light Distributors for Michigan

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Ann Arbor, Mich.

Electrical Warehouse Company

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Elmer R. Paige

Elkton, Mich.

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1112 Center Street, Bay City, Mich.

## LALLEY-LIGHT

THE ELECTRIC LIGHT AND POWER FOR EVERY FARM

## HERE'S FREE POWER



Wind power, being free power, is the most economical power.

Use it with Model 12 Star Windmill and eliminate the cost of fuel oils, now high in price.

The NO-OIL-EM BEARINGS provide effective lubrication and require oiling but once a year, saving you many trips up the tower.

Write today for catalog No. 95 or see your dealer.

FLINT &amp; WALLING MFG. CO.

STAR WINDMILLS—HOOSIER PUMPS

Department C, KENDALLVILLE, INDIANA



Provide an independent supply of water for farm homes. Easy to install—simple and economical to maintain. Write for Bulletin F.

## SEEDS WANTED

Michigan Grown  
Winter Vetch, Rye and Vetch, June and Mammoth Clover, Alfalfa, Sweet Clover, Alsike and Field Peas. Known varieties of Garden Peas, Beans and other Garden Seeds, if High Germination and 1919 crop.

Send samples for test.  
The C. E. DePuy Co. Pontiac, Mich.

## RED ROCK WHEAT

Grown from certified seed; absolutely pure and free from smut, no rye, no foul stuff. In 10 bu. lots, \$3.00, bag extra. Wesley Hile, R. D. 6, Ionia, Citizens phone. Saranac, Mich.

## SEED WHEAT

Selections of pure seed of Fultz and Poole varieties for starting high-grade seed crops. We have a limited quantity of very fine seed. Booklet. Samples.

O. C. Shepard Co. Box 62, Medina, O.

## FRUIT SALES

Sell direct to consumers in Minnesota. Individual Sales Service for quality foods. Information free by return mail. D. M. Wigle, Box 347A, Rochester, Minn.

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Many rural readers have bought their daily and the Michigan Farmer in combination at a price that saved them money.

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Your Favorite Daily—One Year

On rural routes only at prices specified below in "Our Price" column.

	Regular Price.	Our Price.
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Blade, Toledo .....	5.00	4.50
News-Bee, Toledo .....	5.00	4.50

The above combinations give you an average saving of Fifty Cents.

The Michigan Farmer, Detroit





### PICNICS ARE POPULAR.

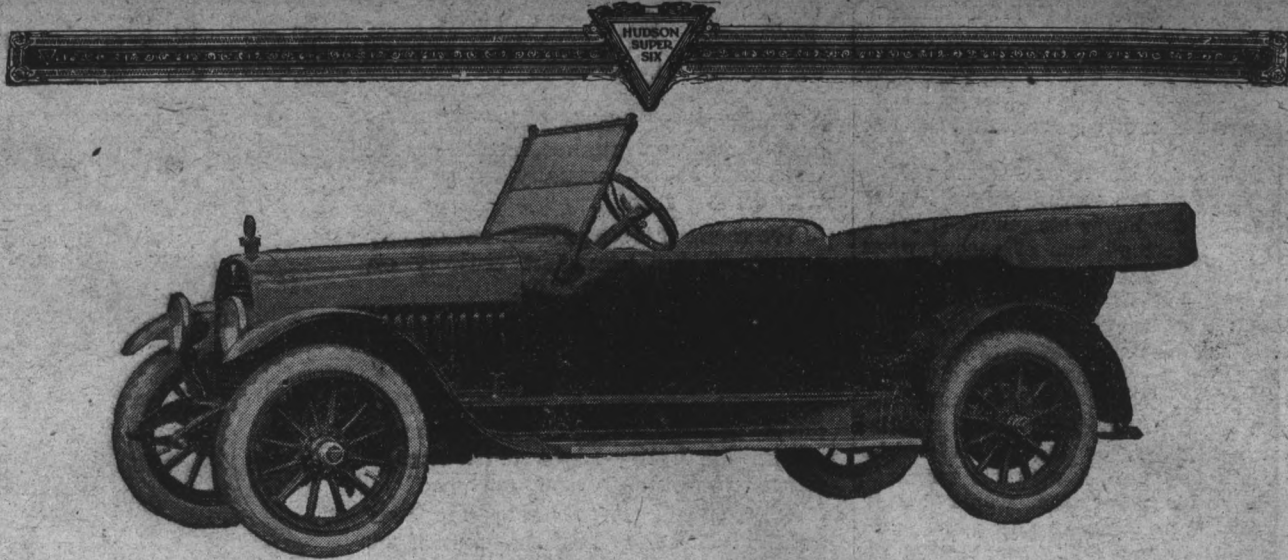
MECOSTA County Farm Bureau picnic was recently held at Horsehead Lake. And if the large crowd at this picnic is any indication of the interest in the farm bureau work, it would show that the people in general are very much alive to the necessity of the farm bureau organization. It was estimated that about nine hundred people were in attendance. Jason Woodman gave a masterly address on "The Farmer and Conditions of Farm Life."

Ottawa County Farm Bureau picnic, held at Riverside Park, near Coopersville, on August 20, was attended by about six thousand people. Mr. L. D. Hagerman is one of the live county agents of the state. He seems to have the confidence of the people in this county, and a great good is being accomplished for agriculture. The farmers of Ottawa county are anxious to help in perfecting a State Farm Bureau organization, and they say that this is the thing which must be accomplished, and is one of the real needs of farming. An interesting talk was given by Mr. Baur on "The Boys and Girls of Today." Mr. Colon C. Lillie explained some of the necessities of getting behind the farm bureau organization and helping push same forward to completion.

Lapeer county picnic was held at Lake Nipissing, August 21. This is an old established farmers' picnic, being the forty-third annual event. The attendance was not as large this year owing to several attractions in the county on the same date. However, about nine hundred people were present and the farmers showed real enthusiasm over the farm bureau organization work. L. T. Bishop, county agent for Lapeer county, is helping to bring the standard of agriculture in Lapeer county to a higher level.

A big tractor demonstration was held at the Wayne county picnic at Avondale Stock Farm, in the forenoon, lasting until about two o'clock, at which time the merits of several types of tractors were demonstrated to their advantages. There were about five thousand people in attendance, and all seemed greatly interested in the Farm Bureau organization in general. O. I. Gregg, county agent of Wayne county, is doing good work among the farmers of this county. Comfort A. Tyler acted as chairman for the afternoon program. Frank Sandhammer gave a talk on County Farm Bureau work. A very stirring address was given by Milo Campbell on "The Farmer and Farmers' Organization." Mr. Campbell is president of the National Dairyman's Association, also of the Federation of National Farm Organization. He left many challenging thoughts with the farm folks at this time.

The secretary in his work in the different parts of the state, finds that the farmers are really awakening to the necessity of an organization representing their interests. In the talks given to the farm bureau picnics he finds that a great deal of interest is taken in the explanation of the state organization and its relation to the agricultural conditions. Also in meeting with the individual farmers and talking over the situation with them, they all agree that this is the one thing necessary, and that they are ready to back up such an organization when it is put before them in the right light. They will get behind same with both financial and moral support. This first trip among the farmers of the state by the secretary of the State Farm Bureau has been very satisfactory and furnished much encouragement toward the work being done. C. B.



## What Car Now Rivals The Hudson Super-Six?

*Experience Gained in Building 60,000 Super-Sixes Result in the Car Which Men Say Has No Rival*

Owners of earlier Hudson Super-Sixes—there are 60,000—are the most appreciative appraisers of the new model.

They know the reliability of Hudson endurance and have long said it was potentially the greatest car built. The improvements their experience has suggested have been made. Annoyances that have been regarded as inevitable to all cars have been eliminated.

With practically every dealer, his first sales of the new Hudson Super-Six were made to those who have owned Hudsons for years.

### They Saw Qualities You Will Want

This is the tenth year of Hudson leadership. The Super-Six is four years old. When it came the trend was towards motors of many cylinders. But its freedom from vibration, obtained by a patented motor which added 72% to power without increase of size or weight was what had been sought for. Smoothness meant easier riding and greater endurance.

The Super-Six established its leadership in these qualities in every avenue open to such proof. It became the most famous speed car.

But the Super-Six was not designed as a race car. It merely established its speed qualities in the development of its value as a reliable enduring car such as you want.

Those qualities were established with the first Super-Six. Subsequent models revealed

the refinements that came only from experience. Each year saw an advancement over previous models. This new model attains the ideal for which we have sought.

No other fine car is so well regarded by so many people. There is a Hudson Super-Six for each six miles of improved roadway in America. You will see more Hudson closed-and chauffeur-driven cars on Fifth Avenue than of any other make. It is the choice car of the business man, the farmer, the rancher, the mountaineer and the tourist. With changes that can be made in any Super-Six, it is the car upon which race drivers rely to win prizes in 500-mile speedway events or in the most famous road races.

### How It Was Improved

The new Super-Six starts easier, rides easier and runs smoother. All its excellent qualities you know are retained—in many instances, enhanced.

Owners of earlier Hudsons see its finer values as you detect the matured nature of a friend in whom you have long admired qualities of sturdiness and reliability.

Each season has seen a Hudson shortage. Reports from dealers indicate sales are increasing faster than production. Buyers have waited months to get the car of their choice. You will do well to decide now.

(1083)

Hudson Motor Car Company

Detroit, Michigan

## SOW SALZER'S SEEDS

to get a bigger and better yield. More than a half century of Successful Seed Service has taught us that quality seeds regardless of price are what the seed buyer wants.

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Salzer's seeds are the best that experience and money can produce.

It is our desire to render a real seed service—one that will help to build up the agriculture of the country. Let us help you.

Salzer's fall catalog—a complete list of Bulbs, Fall Wheat, Winter Rye, Emmer, Timothy, Clover, and Potatoes—is ready for distribution. Write for it today. Your name and address on a post card will bring it to your door. Do not delay.

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Box 135 La Crosse, Wisconsin.

## BETTER LIGHT AT LESS EXPENSE

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Think of the convenience of turning a key and having a brilliant light that floods the farthest corner of your home and barn. What a pleasure and comfort to read by a good light in the long winter evenings. Used for cooking and ironing also. Cuts the drudgery out of meal getting. The clean hot, steady flame of carbide gas removes the big troubles of cooking with wood, coal or oil, insuring a real kitchen comfort.

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# WORLD EVENTS IN PICTURES



Miss Marjorie F. Kinder, aged 14, National Junior Champion, who is competing with country's best at the National Rifle Tournament of Army, Navy and Civilian Experts on the U. S. Navy Rifle Range at Caldwell, New Jersey.



American Relief Committee Feeding Lithuanian Children—Members of the American Relief Committee feeding children in Karno, Lithuania. The committee feeds thousands throughout Poland every day.



After exciting chase twice across the ocean, resulting from a mistake in cablegram transmission, met and were married at Havre.



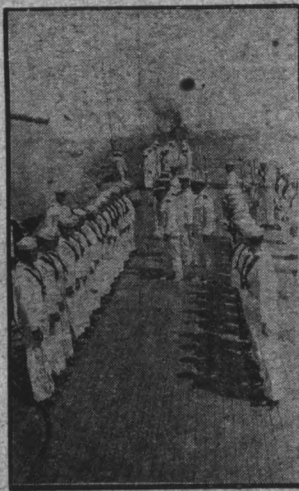
That the actors' strike is still progressing merrily in spite of the \$500,000 suit instituted against them, is shown by this automobile-full and their big sign. Left to right: Frances Garson, Daisy Belmonte, Edna Wareker, Clara Campbell, Olga Sarianoff and Elinore Kingsley.



Glenn E. Plumb, author of the Plumb plan for the nationalization of the railroads and sharing of profits by the employees.



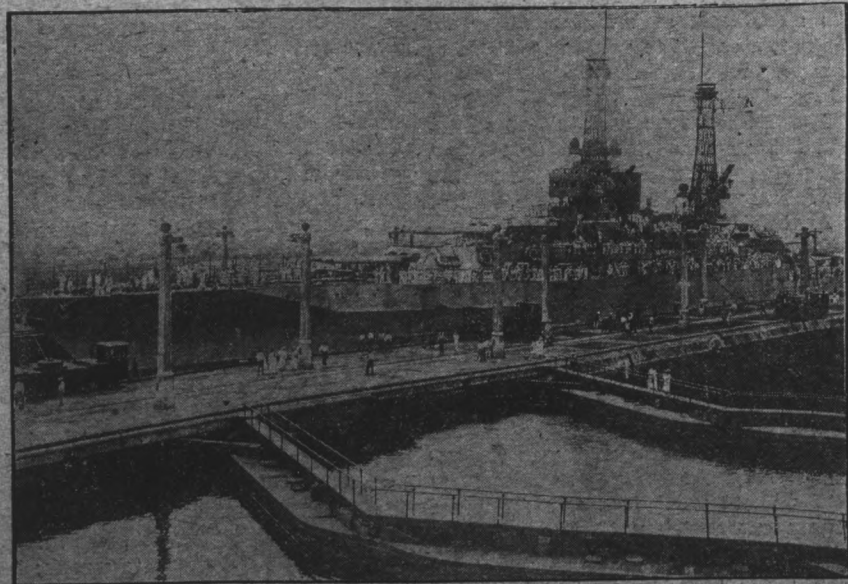
Henry Ford's Party of Famous Men at Green Island. Left to right: H. S. Firestone, Jr., H. S. Firestone, Thomas A. Edison, John Burroughs, Mayor James A. Watt, of Albany, Henry Ford, Chauncey D. Hakes and Samuel Ott.



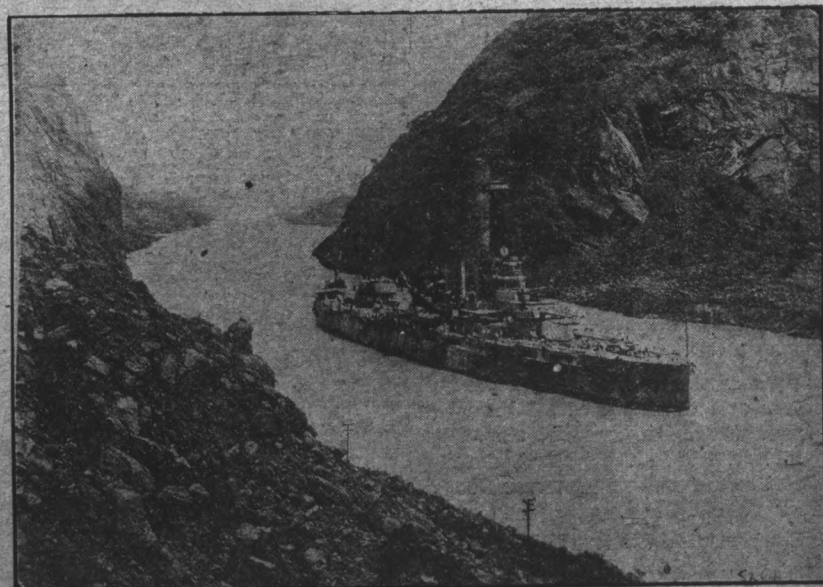
Capt. W. V. Pratt of the U. S. S. New York inspecting crew as vessel approached San Diego.



Philippine Scouts' Team of Expert Riflemen, which came all the way from our eastern possession to compete with nation's best marksmen on the Caldwell, N. J., Rifle Range, August 4-30.

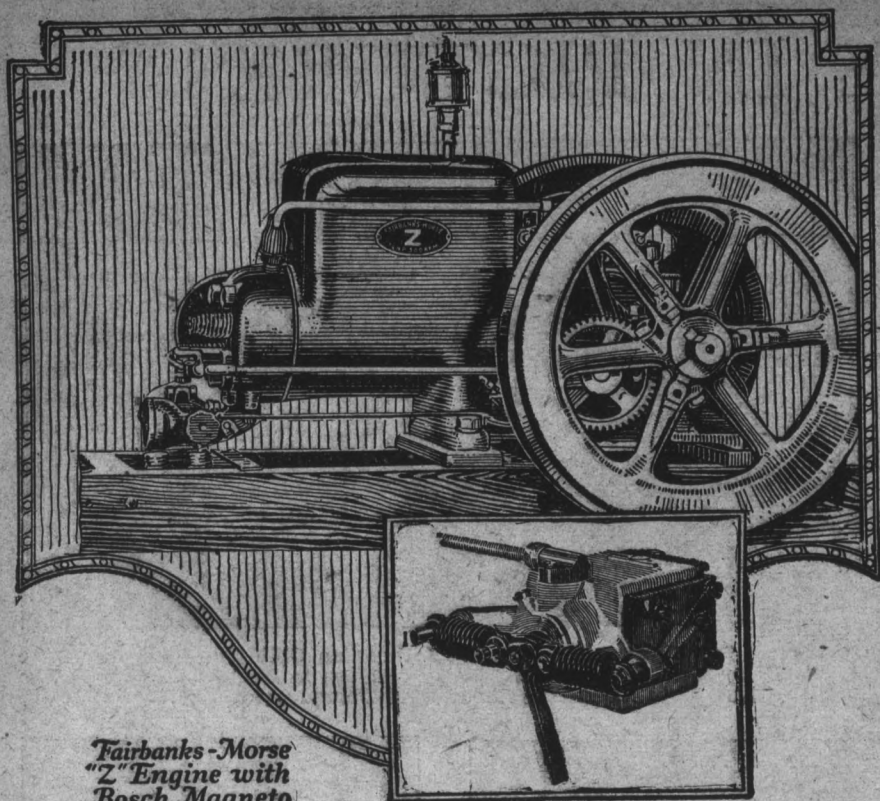


U. S. Ship New Mexico, Flagship of the New Pacific Fleet, shown in the Upper West Channel of the Gatun Locks, Panama Canal, giving Locks their severest test. Flagship with Fleet was on way to western coast.



U. S. Ship Texas passing through the Gaillard Cut, Panama Canal, on its way with the New Pacific Fleet to Western Coast. Because of immense size of vessel, it had to proceed under extreme low speed to avoid sucking in towering banks of the Cut.





Fairbanks-Morse  
"Z" Engine with  
Bosch Magneto

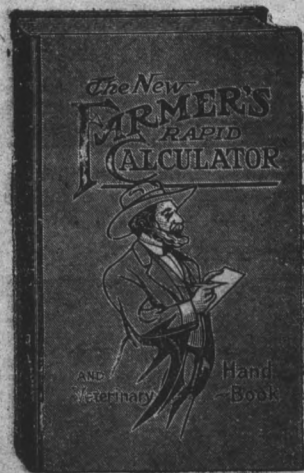
## Greater Engine Value

OVER 250,000 farmers bought the "Z" engine. They know it is powerful, dependable, and practically fool-proof—truly a great engine. But now we announce the one addition which could possibly improve the "Z" performance—Bosch high tension, oscillating magneto ignition. So let the "Z" dealer near you show you in detail this greater engine value. Over 200 Bosch Service Stations combine with "Z" dealers to give every farmer buyer a remarkably complete engine service. Prices—1½ H. P. \$75.00—3 H. P. \$125.00—6 H. P. \$200.00—All F.O.B. Factory.

## Fairbanks, Morse & Co.

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Indispensable to the farmer, valuable to all members of the family. This little book contains veterinary information, interest tables, methods of calculation, weights, measures, dimensions, etc., and a farm record which contains a simple method of keeping record of receipts and expenses of all branches of farm work. Convenient size, 3½ x 6½ inches, fits in the pocket, durable cloth binding. A time-saver every farmer should have.

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### MYERS HONOR-BILT PUMP JACKS

With your gasoline engine or motor, a Myers Pump Jack gives you plenty of water all the time. Easily attached to any windmill pump without disturbing pump or pipe. Several styles. All have heavy machinecut gears, steel shafting and pins, and are built with either wood or steel side arms. Simple and rugged, they stand years of hard use. Each one bears the Myers stamp of quality. It is a mark of better service in Pumps, Pump Jacks, Hay Tools and Door Hangers. Your dealer will show you, or write direct.

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### PUMPS FOR EVERY PURPOSE

### DON'T SOW SMUTTY IMPURE SEED WHEAT

For a number of years Inspected seed growers of the Michigan Crop Improvement Association have been rousing their fields free from mixtures and weeds. All the wheat to be eligible for inspection must be treated for smut and must pass field and threshed grain inspection for presence of it or any other disease or impurity.

### Grow Red Rock Wheat

Inspected and Approved by the Michigan Crop Improvement Ass'n

Write for the Inspected Seed Requirements and for a list of growers to the Association Secretary.

J. W. Nicolson East Lansing, Mich.



**ECONOMY FEEDER**  
A perfect working self-feeder for hogs. A 100-lb. pig pays for it. Saves on purchase price, time, floor space, repairs and feed. Will feed 40 hogs. Sold direct, \$18.50. Money refunded if not satisfied. For further information address, THE ECONOMY FEEDER CO., Box 536, New Washington, O.

## The March of the White Guard —By Sir Gilbert Parker

Already the handful of people at the Fort had gathered. Indians left the store and joined the rest; the Factor and Sergeant Gosse set out to meet the little army of relief. God knows what was in the hearts of the Chief and Jaspar Hume when they shook hands. To the Factor's name of the Hudson Bay Company, Mr. Hume, there came "By the help of God, sir," and he pointed to the sled whereon Varre Lepage lay. A feeble hand was clasped in the burly hand of the Factor, and then they fell into line again, Cloud-in-the-Sky running ahead of the dogs. Snow had fallen on them, and as they entered the stockade, men and dogs were white from head to foot.

The White Guard had come back! They were met with cries of praise, broken by an occasional choking sound from men like Sergeant Gosse. Jaspar Hume as simply acknowledged his welcome as he had done the Godspeed two months and more ago. He with the Factor bore the sick man in, and laid him on his own bed. Then he came outside, and when they cheered him again, he said, "We have come safely through and I am thankful. But remember that my comrades in this march deserve your cheers in this as much as I. Without them I could have done nothing in the perils that lay between here and the Barren Grounds."

"In our infirmities and in all our dangers and necessities," added Jeff Hyde, "the luck of the world was in the book!"

In another half-hour the White Guard was at ease, and four of them were gathered about the great stove in the store, Cloud-in-the-Sky smoking placidly, and full of guttural emphasis; Late Carscallen moving his animal-like jaws with a sense of satisfaction; Gaspe Toujours talking in Chinook to the Indians, in patois to the French clerk, and in broken English to them all; and Jeff Hyde exclaiming on the wonders of the march, the finding of Varre Lepage at Manitou Mountain, and of himself and Gaspe Toujours buried in the snow.

### CHAPTER VII.

IN Jaspar Hume's house at midnight Varre Lepage lay asleep with his wife's letters—received through the Factor—clasped to his breast. The firelight played upon a face prematurely old—a dark disappointed face—a doomed face, as it seemed to the old Factor.

"You knew him, then," the Factor said, after a long silence.

"Yes; I knew him well, years ago," replied Jaspar Hume.

Just then the sick man stirred in his sleep, and said disjointedly, "I'll make it all right to you, Jaspar." Then came a pause and a quiver utterance, "Rose—I love you—Forgive forgive!" The Factor rose and turned to go, and Jaspar Hume, with a despairing, sorrowful gesture, went over to the bed.

Again the voice said, "Ten years—I have repented ten years—My wife—Don't, don't—I dare not speak—Jaspar forgives me, oh, Rose!"

The Factor touched Jaspar Hume's arm. "This is delirium," he said. "He has fever. You and I must nurse him, Hume. You can trust me—you understand."

"Yes, I can trust you," was the reply. "But I can tell you nothing."

"I do not want to know anything. If you can watch until two o'clock I will relieve you. I'll send the medicine chest over. You know how to treat him."

The Factor passed out and the other

er was left alone with the man who had wronged him. The feeling most active in his mind was pity, and as he prepared a draught from his own stock of medicines, he thought the past and the present all over. He knew that however much he had suffered, this man had suffered more. And in this silent night there was broken down any slight barrier that might have stood between Varre Lepage and his complete compassion. Having effaced himself from the calculation, justice became forgiveness.

He moistened the sick man's lips and bathed his forehead, and roused him once to take a quieting powder. Then he sat down and wrote to Rose Lepage. But he tore the letter up again and said to the dog: "No, Jacques, I cannot; the Factor must do it. She needn't know yet that it was I with the White Guard who saved him. It doesn't make any burden of gratitude for her, if my name is kept out of it. And the Factor must not mention me, Jacques—not yet. And when he is well we will go to London with it, Jacques, and we need not meet her; and it will be all right, Jacques: all right!"

And the dog seemed to understand; for he went over to the box that held it; and looked at his master. And Jaspar Hume rose and broke the seal and unlocked the box and opened it; but he heard the sick man moan and he closed it again and went over to the bed. The feeble voice said, "I must speak—I cannot die so—not so—Jaspar."

And Jaspar Hume murmured, "God help him." And he moistened the lips once again, and put a cold cloth on the fevered head, and then sat down by the fire again. And Varre Lepage slept. As if some charm had been in that "God help him," the restless hands grew quiet, the breath became more regular, and the tortured mind found a short peace. With the old debating look in his eyes, Jaspar Hume sat until the Factor relieved him.

### CHAPTER VIII.

FEBRUARY and March and April were past and May was come.

Varre Lepage had had a hard struggle for life, but he had survived. For weeks every night there was a repetition of that first night after the return: delirious self-condemnation, entreaty, and love of his wife, and Jaspar Hume's name mentioned now and again in shuddering remorse. With the help of the Indian who had shared the sick man's sufferings in the Barren Grounds, the Factor and Jaspar Hume nursed him back to life. Between the two watchers no word had passed after the first night regarding the substance of Varre Lepage's delirium. But one evening the Factor was watching alone, and the repentant man from his feverish sleep cried out, "Hush, hush; don't let them know—I stole them both from him—and the baby died because of that; God took it—and Rose did not know! She did not know!"

The Factor rose and walked away. The dog was watching him. He said to Jacques: "You have a good master, Jacques—too good and great for the H. B. C."

### CHAPTER IX.

IT is the tenth of May. In an armchair made of hickory and birch bark by Cloud-in-the-Sky, sits Varre Lepage reading a letter from his wife. She is at Winnipeg, and is coming west as far as Regina to meet him on his way down. He looks a wreck; but a handsome wreck! His refined features, his soft black beard and blue eyes, his graceful hand and gentle



manners, one would scarcely think belonged to an evil-hearted man. He sits in the sunlight at the door, wrapped about in moose and beaver skins. This world of plain and wood is glad. Not so Varre Lepage. He sat and thought of what was to come. He had hoped at times that he would die, but twice Jaspar Hume had said, "I demand your life: you owe it to your wife—to me—to God!" And he had pulled his heart up to this demand and had lived. But what lay before him? He saw a stony track, and he shuddered. The Bar of Justice and Restitution raised its cold barriers before him; and he was not strong.

As he sat there facing his future Jaspar Hume came to him and said, "If you feel up to it, Lepage, we will start for Edmonton and Shovanne on Monday. I think it will be quite safe, and your wife is anxious. I shall accompany you as far as Edmonton; you can then proceed to Shovanne by easy stages, and so on east in the pleasant weather. Are you ready to go?"

"Yes; I am ready."

#### CHAPTER X.

ON a beautiful May evening Varre Lepage, Jaspar Hume, and the White Guard are welcomed at Fort Edmonton by the officer in command of the Mounted Police. They are to enjoy the hospitality of the Fort for a couple of days, before they pass on. Jaspar Hume is to go back with Cloud-in-the-Sky and Late Carscallen, and a number of Indian carriers, for this is a journey of business too. Gaspé Toujours and Jeff Hyde are to press on with Varre Lepage, who is now much stronger and better. One day passes, and on the following morning Jaspar Hume gives instructions to Gaspé Toujours and Jeff Hyde and makes preparations for his going back. He is standing in the Barracks Square, when a horseman rides in and inquires of a sergeant standing near, if Varre Lepage has arrived at the Fort. A few words bring out the fact that Rose Lepage is nearing the Fort from the south, being determined to come on from Shovanne to meet her husband. The trooper thinks she is now about eight or ten miles away; but is not sure. He had been sent on ahead the day before, but his horse having met with a slight accident, he had been delayed. He had seen the party, however, a long distance back in the early morning. He must now ride away and meet Mrs. Lepage, he said. He was furnished with a fresh horse and he left, bearing a message to the loyal wife from Varre Lepage.

Jaspar Hume decided to leave Fort Edmonton at once, and to take all the White Guard back with him; and gave orders to that effect. He entered the room where Varre Lepage sat alone, and said: "Varre Lepage, the time has come for us to say good-by. I am starting at once for Fort Providence."

But the other replied: "You will wait until my wife comes. You must." There was pain in his voice.

"I must not."

Varre Lepage braced himself for a heavy task and said: "Jaspar Hume, if the time has come to say good-by, it has also come when we should speak together for once openly: to settle, in so far as can be done, a long account. You have not let my wife know who saved me. That appears from her letters. She asks the name of my rescuer. I have not yet told her. But she will know that today, when I tell her all."

"When you tell her all?"

"When I tell her all."

"But you shall not do that."

"I will. It will be the beginning of the confession which I shall afterward make to the world."

"By Heaven you shall not do it. Coward! Would you wreck her life?" Jaspar Hume's face was wrathful, and remained so till the other sank back in the chair with his forehead in his hands; but it softened as he saw this

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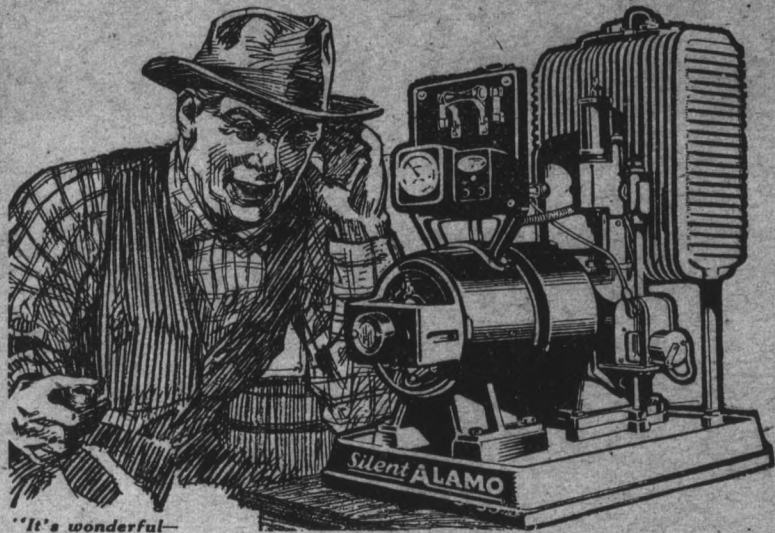
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remorse and shame. He began to see that Varre Lepage had not clearly grasped the whole situation. He said in quieter, but still firm tones: "No, Lepage, that matter is between us two, and us alone. She must never know—the world therefore must never know. You did an unmanly thing: you are suffering a manly remorse. Now let it end here—but I swear it shall," he said in fierce tones, as the other shook his head negatively; "I would have let you die at Manitou Mountain if I had thought you would dare to take away your wife's peace—your children's respect."

"I have no children; our baby died."

Jaspar Hume again softened; "Can you not see, Lepage? The thing cannot be mended." Just then his hand touched the book that he still carried in his bosom, and as if his mother had whispered to him, he continued: "I bury it all, and so must you. You will begin the world again—old friend—and so shall I. Keep your wife's love and respect. Henceforth you will deserve it."

Varre Lepage raised moist eyes to the other and said "But you will take back the money I got for that!"

There was a pause, then Jaspar Hume replied: "Yes, upon such terms, times, and conditions as I shall hereafter fix. And you have no child, Lepage?" he added gently.

"We have no child; it died with my fame."

Jaspar Hume looked steadily into the eyes of the man who had wronged him: "Remember, Varre, you begin the world again. I am going now. By the memory of old days, good-by;" and he held out his hand. Varre Lepage took it and rose tremblingly to his feet, and said, "You are a good man, Jaspar Hume. Good-by!"

The Sub-factor turned at the door. "If it will please you, tell your wife that I saved you. Someone will tell her; perhaps I would rather—at least it would be more natural, if you did it." He passed out into the heat of sunshine that streamed into the room and fell across the figure of Varre Lepage, who sat and said dreamily, "And begin the world again."

Before Jaspar Hume mounted, almost immediately after, to join the White Guard now ready for the journey back, Jacques sprang upon him and pushed his nose against his master's heart. And once again, and for the last time that we shall hear it, Jaspar Hume said, "It's all right, my Jacques."

And then they started for the north again. As they were doing so, a shadow fell across the sunlight that streamed upon Varre Lepage. He looked up. There was a startled cry of joy, an answering exclamation of love, and Rose Lepage was locked in her husband's arms.

A few moments after and the sweet-faced woman said: "Who was that man who rode away to the north as I came up, Varre? He reminded me of someone, but I can't think who it is."

"That was the leader of the White Guard, the man who saved me, my wife." He paused a moment and then solemnly said, "That man was Jaspar Hume!"

The wife rose to her feet with a spring. "He saved you! He saved you! Jaspar Hume—oh, Varre!"

"He saved me, Rose!"

Her eyes were wet: "And he would not stay and let me thank him! Poor fellow: poor Jaspar—Hume! Has he then been up here these ten years?"

Her face was flushed, and pain was struggling with the joy she felt in seeing her husband again.

"Yes, he has been up here all that time."

"He has not succeeded in life, Varre!" and her thoughts went back to the days when, blind and ill, Jaspar Hume went away for health's sake, and she remembered how sorry then

the felt for him, and how grieved she was that when he came back strong and well, he did not come near her or her husband, and offered no congratulation. She had not deliberately wronged him. She did not know he cared for her; but so did Varre Lepage. A promise had been given to neither when Jaspar Hume went away; and after that she grew to love the successful, kind-mannered genius who became her husband. Even in this happiness of hers, sitting once again at her husband's feet, she thought with a tender and glowing kindness of the man who had cared for her eleven years ago; and who had but now saved her husband.

"He has not succeeded in life," she repeated softly.

Looking down at her, his brow burning with a white heat, Varre Lepage said, "He is a great man, my wife."

"I am sure he is a good man," she added.

Perhaps Varre Lepage had borrowed some strength from Jaspar Hume, for he said almost sternly, "He is a great man."

His wife looked up half-startled at the tone and said, "Yes, dear; he is a good man—and a great man."

The sunlight still came in through the open door. The Saskatchewan flowed swiftly between its verdant banks, an eagle went floating away to the west, robins made vocal a solitary tree a few yards away, troopers moved back and forward across the square and a hen and her chickens came fluttering to the threshold. The wife looked at the yellow brood drawing close to their mother, and her eyes grew wistful. She thought of their one baby asleep in an English grave. But thinking of the words of the captain of the White Guard, Varre Lepage said, "We will begin the world again, my wife."

She smiled, and rose to kiss his forehead as the hens and chickens hastened away from the door, and a clear bugle call sounded in the square.

"Yes, dear," she said, "we will begin the world again."

#### CHAPTER XI.

ELEVEN years have gone since that scene was enacted at Edmonton, and the scene rises for the last act of that drama of life which is connected with the brief history of the White Guard.

A great gathering is dispersing from a hall in Piccadilly. It has been drawn together to do honor to a man who has achieved a triumph in engineering science. As he steps from the platform to go he is greeted by a fusillade of cheers. He bows calmly and kindly. He is a man of vigorous yet reserved aspect; he has a rare individuality. He receives with a quiet cordiality the personal congratulations of his friends. He remains for some time in conversation with a royal Duke who takes his arm and with him passes into the street. The Duke is a member of this great man's club, and of





fers him a seat in his brougham. Amid the cheers of the people they drive away together. Inside the club there are fresh congratulations, and it is proposed to arrange an impromptu dinner, at which the Duke will preside. But with modesty and honest thanks the great man declines. He pleads an engagement. He had pleaded an engagement the day before to a well-known society. After his health is proposed he makes his adieus, and leaving the club, walks away toward a West-end square. In one of its streets he pauses and enters a building called "Providence Chambers." His servant hands him a cablegram. He passes to his library, and standing before the fire, opens it. It said, "My wife and I send congratulations to the great man."

Jaspar Hume stands for a moment looking at the fire, and then says simply, "I wish my poor old Jacques was here." He then sits down and writes this letter:

"My Dear Friends:—Your cablegram has made me glad. The day is over. My last idea was more successful than I even dared to hope, and the world has been kind. I went down to see your boy, Jaspar, at Clifton last week. It was the thirteenth, his birthday, you know, ten years old, and a clever, strong-minded little fellow. He is quite contented. As he is my god-child I again claimed the right of putting a thousand dollars to his credit in the bank—I have to speak of dollars to you people living in Canada—which I have done on his every birthday. When he is twenty-one he will have twenty-one thousand dollars—quite enough for a start in life. We get along well together, and I think he will develop a fine faculty for science. In the summer, as I said, I will bring him over to you. There is nothing more to say tonight except that I am as always,

"Your faithful friend,  
JASPAR HUME."

A moment after the letter was finished the servant entered and announced, "Mr. Late Carscallen." With a smile and hearty greeting the great man and this member of the White Guard meet. It was to entertain his old Arctic comrade that Jaspar Hume had declined to be entertained by society or club. A little while after, seated at the table, the ex-Sub-factor said: "You found your brother well, Carscallen?"

The jaws moved slowly as of old. "Ay, that, and a grand minister, Captain."

"He wanted you to stay in Scotland. I suppose?"

"Ay, that, but there's no place for me like Fort Providence."

"Try this pheasant. And you are Sub-factor now, Carscallen!"

"There's two of us Sub-factors—Jeff Hyde and myself. Mr. Fleid is old and can't do much work, and trade is heavy now."

"Yes; I hear from the Factor now and then. And Gaspé Toujours?"

"He went away three years ago, but he said he'd come back. He never did though. Jeff Hyde believes he will. He says to me a hundred times: 'Carscallen, he made the sign of the cross that he'd come back from Saint Gabrielle; and that's next to the Book with a Papist. If he's alive he'll come.'"

"Perhaps he will, Carscallen. And Cloud-in-the-Sky?"

"He's still there, and comes in and smokes with Jeff Hyde and me, as he used to do with you sir; but he doesn't obey orders as he did those of the Captain of the White Guard. He said to me when I left, 'You see Strong-back, tell him Cloud-in-the-Sky good Indian—he never forget. How!'"

Jaspar Hume raised his glass with smiling and thoughtful eyes: "To Cloud-in-the-Sky and all who never forget!" he said.

THE END.

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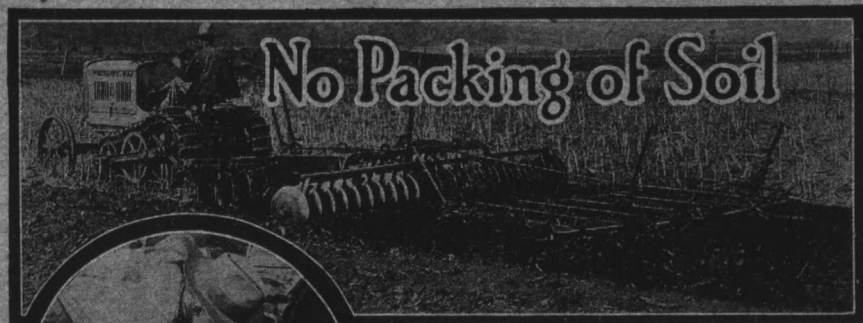
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**The Michigan Farmer**





## No Packing of Soil



## Completely Prepares Seed Bed

Practically any tractor will plow. But model "D" BATES STEEL MULE completely prepares the seed bed from plowing to planting—plows, discs, harrows, rolls, plants. For it does not and cannot pack the softest soil. Its weight—3.5 pounds per square inch of track surface—is no greater than the weight under the shoes of a small boy.

### Horse Upkeep Reduced

Because BATES STEEL MULE completely prepares the seed bed in all weather conditions and works even through mud holes, it is unnecessary to retain as large a number of horses on your farm as it is where other type tractors are used. Ask any owner. You get an immediate profit from the sale of more horses than is possible with other tractors. And a continuous saving in feeding and upkeep of horses. You can plant money-making crops on the five acres required to feed each horse.

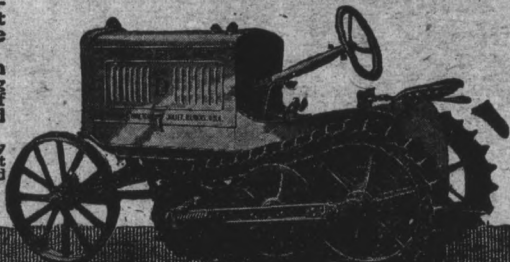
### A Dependable Tractor

The Model "D" BATES STEEL MULE for its weight delivers more pull and greater speed under more different conditions than any other three-plow tractor built. It keeps in running order longer than other tractors because of its big oversize working parts. It will outwear three ordinary tractors. It is built of better and more expensive materials than the average tractor can afford. The little extra that the BATES STEEL MULE costs over the average three-plow tractor gives it just that dependability and capacity for work that all farmers need. People like John Dodge, the automobile maker; Parke-Davis Co., the serum people; Acme Cement Co., of St. Louis, Mo.; Acme, Okla., and others use BATES STEEL MULES for their farm work. Send today for free copy of valuable tractor book.

Geo. A. Eaton, 224 S. Capital Ave., Lansing, Mich.

**BATES MACHINE & TRACTOR CO.**

617 Benton St., Joliet, Ill.



## Crop Yield Increased

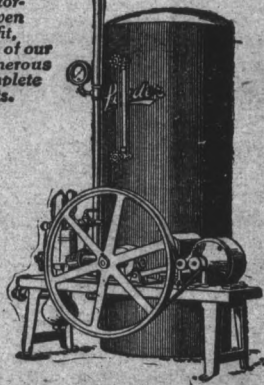
Next visit some farm on which other type tractors are used. Note how much smaller the crop planted in the wheel tracks than that planted between the wheel tracks. Note how soil packing of heavy tractor wheels has held back the growth—forced moisture from the soil—packed the ground so solidly that life giving air scarcely reaches the seeds.

Compare this with the full, even growth all over the farm using BATES STEEL MULE. Think of the value of this increased yield with present food prices.

That is merely one of many reasons why 80% of all BATES STEEL MULES built are sold to farmers who formerly owned wheel type tractors.

## The Bates Steel Mule

An ideal Motor-Driven outfit, one of our numerous complete units.



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If you plan to have a water system installed in your home or farm, you should not deal with a concern which is too far away from your locality to know what your special water needs are.

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**Kerr Machinery Corporation,**  
Detroit, Mich.

## Getting Ideas First-Hand

(Continued from page 231).

The county farm bureau and M. A. C. George Grantham, of the soils department; Ezra Levin, muck crops demonstration, took an important part and hundreds of the farmers in attendance followed them about to learn all they could.

The farms visited were as follows: Soil experiments on the farms of E. D. Fairchild and H. C. Sturgis. One was a sandy loam and the other prairie. The septic tanks were found on

sive experiments were being conducted on the Stevenson Brothers' farm in three different varieties in alfalfa in the same twenty-acre field.

At noon the writer and the Calhoun county agent, P. C. Jamieson, caught up with the procession, after driving over fifty miles. It was a picnic dinner on the shore of Klinger's lake, east of White Pigeon. There is a large and fine resort called Oakwood. After dinner Mr. Wendt called to order and George Grantham, Ezra Levin, Miss



Mr. Wendt Tells Farmers the Result of Oat Experiment.

the Fred Pashby and Charles Curtiss farms. Construction was in progress on the first farm. At the Curtiss farm is a splendidly equipped home. The kitchen is well supplied with all sorts of labor-saving devices, running water, a well-equipped bathroom, etc. The septic tank was complete and in operation.

On the Albert G. Wade farm, one mile west of White Pigeon, is a fine herd of pure-bred Holstein cattle and Poland China and Berkshire swine. At the Mark Harrison farm there were over seven hundred Brown Leghorn hens scratching around, performing their toilet and actively engaged in their natural vocation in life. Extension

Jones, also Jason Woodman, of Kalamazoo county, gave short talks.

One picture shows Mr. Levin caught in the act of intently holding the attention of the audience. No one went to sleep when he was on deck, even though it was just after dinner and quite warm, even in the shade.

The writer took several pictures on the Woodward Brothers' farm. One shows the peppermint in cleanly cultivated rows. In another Mr. Wendt is explaining the various plots of oats in the trial tests. A bird's-eye view of the farm shows several hundred acres of muck well drained and in cultivation to various crops. R. E. Zimmerman is superintendent of this farm.



A Fine Stand of Peppermint on Woodward Brothers' Farm.

## Selecting Male Birds

AS the male birds are of greatest importance in poultry breeding because of their influence on every egg, it pays to select them with care. Farmers who have large flocks of poultry but have made no effort to increase egg production can obtain fine cockerels in the following manner: Purchase one vigorous year-old hen with a record of two hundred eggs per year or better. Mate her with a cockerel from a high-producing hen. The cockerels that result from that mating should be valuable to mate with the farm flock and increase the egg-laying ability of the pullets that result from the flock mating. Of course, there will be more eggs for hatching if a larger start is made but it is better to have two birds of guaranteed quality for foundation stock than many birds of unknown value.

Vigor should be emphasized in selecting the male birds for breeding. I saw a cockerel purchased by a farmer last year because he was said to be bred from bred-to-lay stock. His pedigree was undoubtedly all right but when the bird arrived he had all the marks showing a lack of vitality and such a bird should never be used to mate with a farm flock in spite of the pedigree.

In breeding fancy poultry it is necessary to select according to the demands of the Standard of Perfection in order to win prizes in strong competition. Even then a bird with fine markings should not be used if it is lacking in vigor. It will usually be better to use a bird that is stronger in vitality even though slightly inferior in fancy points. I believe that the apparent vigor of the bird should be a



strong factor in placing awards in the show room because it is so important in actual breeding operations and it cannot be neglected in poultry breeding without serious losses and discouragement.

The quality of the flock of cockerels saved for breeding is greatly influenced by the skill in culling the broiler and roaster stock. Keep the well-marked cockerels that feather early, grow rapidly, show vigor and are well marked for the breed. Market as broilers the slow-feathering birds that are off color and show any appearance of being slightly lacking in physical stamina. Never feel mean toward the cockerels that fight the other members of the flock and drive them around. They are apt to be the best and most vigorous and they display their "pep" and breeding value by their pugnacious disposition.

Mark the cockerels that show quality with leg bands and keep the best of them for sale as breeders or for the home flock. If they are not marked some of them may be sold as broilers.

#### POUND OF EGGS, PLEASE!

At intervals the question of selling eggs by weight is brought up and discussed and then dropped for future consideration. In the future will the farmer sell eggs by the pound and buyers forget the word dozen as the measure of eggs? There are arguments for both sides of the question.

It seems as if the fairest method of selling eggs is by the pound. One farmer culls his flock and only incubates eggs from the hens that lay a large-sized egg. Eventually the eggs produced on that farm are larger than the ordinary market run of farm eggs. On another farm no effort is made to hatch the best quality of eggs and many small eggs are produced by the laying stock. On the average market the eggs from both farms are sold by the dozen and if the eggs are fresh and equal in other respects, they bring the same returns regardless of the weight.

Possibly when eggs are sold by the pound the restaurant and hotel keepers in some districts will wish to buy small eggs and thus get more eggs for their money. When two eggs are fried it will be difficult for a customer to estimate whether they came from a pair of large or medium-sized shells. Even bantam eggs might be preferred by some buyers because of the large number of eggs they would receive for one pound. However, the large eggs would still contain more real value for the money and there would be less shell in proportion to the edible portions.

One experiment to determine the average weight of market eggs has placed the weight at 1.88 ounces. Then a dozen eggs would weigh 22.5 ounces or 1.4 pounds. At present the sale of eggs by the dozen is simplified because they can be counted out and placed in crates more easily than they can be weighed.

Changes in marketing methods come slowly and it is difficult to change any plan that is giving a fair measure of satisfaction. In some stores bananas have recently been sold by the pound. However, a buyer has been used to buying them by the dozen because he likes to know how many he is going to get. If eggs were graded and sold by the dozen according to size and quality, such a method would correspond with selling bananas at a price from twenty to forty cents per dozen, depending on their size and quality. The trouble with the egg business has been too little grading. This has resulted in the local grocer charging one price for eggs regardless of the size or quality, even though he had a varying schedule for his other products based on their self-evident value. In the future will the city buy-

er call up the grocer and say "A pound of eggs, please." Probably it depends upon the attitude of the producers of eggs. As long as they are satisfied to sell eggs of all sizes by the dozen, the dealers will buy according to that method and eggs will continue to be sold by the dozen and not by the pound.

### "By the Way"

#### EFFICACIOUS REMEDY.

"When I sing the tears come into my eyes. What can I do for this?"  
"Stuff cotton in your ears."

#### A METEOROLOGICAL BOON.

Mr. Hoskins—"Look, my dear, Bertie has sent us a weather barometer!"

Mrs. Hoskins—"How good of the dear boy to be so thoughtful! Which way do we screw it when we want the weather to be fine?"

#### PROUD.

Said Newlywed, "I say, dear one! Your poundcake weighs almost a ton. It's just like lead, and mighty tough. You surely didn't pound enough."  
—Luke McLuke.

"And when this practice you shall get, You will become more skillful yet, Until you very soon can make,"  
He said, "a first-rate batter cake."  
—Newark Advocate.

And stack of pancakes then with pride She brought to him and one he tried, Then whispered, "Tell me truly, Nan, Is this the pancake or the pan?"  
—Detroit Free Press.

Some doughnuts then she did prepare And served them with a haughty air. He took a bite and cried "my luck!" Why did you leave them in the shuck?"

#### A SUMMER HINT.

"Sometimes you have to hit a man to make him keep quiet, so that you can save him from drowning."

"Yes," replied the abrupt person; "and the time to do it is when he first begins to rock the boat."

#### PAYING THE PIPER.

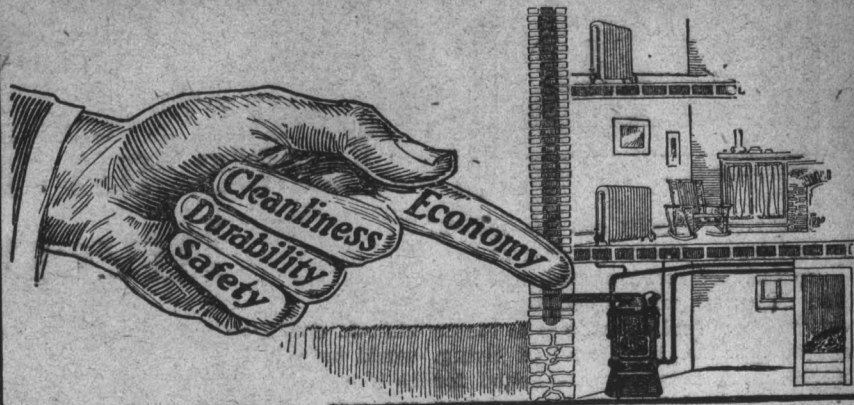
The colored parson had just concluded a forceful sermon on salvation, and the great necessity of adjusting themselves to the requirements of salvation was pointed out to the congregation. He had proclaimed salvation to be free—free as water.

At the conclusion of the sermon he requested the deacons to take up a collection. An important brother in the rear of the church thought that he would call the parson to book on his statement as to salvation being free. He said: "Parson, in yo' sermon yo' jes giv', yo' say dat salvation am free, an' now yo' is orderin' de deacons to pass de hat. I doant understand what yo' means by sayin' it's free, an' axin' fer money."

The parson gave the brother a fierce look, although smiling, as he again took the pulpit to explain, which he did as follows:

"Ise glad de brudder has axed dat question at dis time. Ise glad to make de splanation, an' he will understand how it am. Yo' see, brudder, yo' go down to de river an' de water am flowin' freely, an' dere am a great plenty fer all. Yo' kin drink an' drink all yo' wants, an' fill yo' buckets an' take dem to de house, an' it costs yo' nuffin'. It am free jes as I say, but when yo' has dis water piped into yo' house fer de baffub an' to wash de dishes, de pipin' has to be paid fer. Dis collecshun am to pay fer de pipin'. De brudder deacons will perceive wid passin' de hat an' takin de collecshun, which I knows am gwine to be librel."

## The Best Investment for any Farm House



No other heating method can show as high values in these four vital requirements of a good substantial heating plant.

Ask your dealer today to give you an estimate for equipping your farm house with this great modern comfort. Burns any fuel, does not need cellar, and water pressure is not required. Every farm home should have one of these modern IDEAL Heating Outfits to make the family more content and to keep the young men on the farm who return from demoralized armies.

### AMERICAN & IDEAL RADIATORS & BOILERS

Thousands of farm homes will enjoy the winter in comfort with IDEAL HEATING

An IDEAL Boiler and AMERICAN Radiators can be easily and quickly installed in your farm house without disturbing your present heating arrangements. You will then have a heating outfit that will last longer than the house will stand and give daily, economical, and cleanly service.



IDEAL Boilers will supply ample heat on one charging of coal for 8 to 24 hours, depending on severity of weather. Every ounce of fuel is made to yield utmost results.

Sold by all dealers. No exclusive agents.

#### Have this great comfort in your farm house

You will say that IDEAL heating is the greatest improvement and necessity that you can put on your farm, for it gives you the needed comfort and enjoyment during the long season of zero, chilly, and damp weather.

It is not absolutely necessary to have a cellar or running water in order to operate an IDEAL heating outfit. There is no need to burn high-priced fuel because IDEAL Boilers burn any local fuel with great economy and development of heat.

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We want you to have a copy of "Ideal Heating." It goes into the subject very completely and tells you things you ought to know about heating your home. Puts you under no obligation to buy.



IDEAL-Arcola Radiator-Boilers for small houses without cellars. Hot-water heating as simple and easy as running a stove—one fire heats all rooms. Write for separate booklet "IDEAL-Arcola."

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## Woman's Interests

### Let's all Do a Little Investigating



**I**NVESTIGATIONS are the fashion just now. Every paper you take up tells of some official, suddenly filled with zeal, who is starting an investigation to find out who is to blame for the present high cost of living. Congressman Murdock has asked for a half million dollars to lower prices (and raise taxes), and a general hue and cry, reminding one somewhat of an early English description of a fox hunt, is under way. Meantime the rise in prices goes merrily on, the cost to the consumer of several articles having been raised since investigations began.

But investigations being the rule I have been wondering if it would not be a good thing for each of us to do a little individual investigation. Not of our neighbors, but good, old-fashioned self-examination. To what degree are we personally responsible for the

chaotic condition which exists in the world today? Of course, it is popular to blame it on the Kaiser, he started the war. But I've an idea that he couldn't have done it without a great deal of help from the world at large. We laid the mine, he simply applied the match that started it off.

The German idea of the superman was pretty popular everywhere before the war, as I recall it. Our reading was saturated with it, man's ability to take care of himself without help from a Supreme Being. The teachings of German philosophers were studied by a great many far more religiously than was the Bible, and women whose mothers followed St. Paul, glibly quoted you pages from Nietzsche. I've an

idea that the men and women who forsook the God of their fathers for the teachings of heathen philosophers will not be held free from responsibility when the real day of reckoning comes.

We were drunk with the idea of our own importance and our right to take what we wanted regardless of the other fellow. There was the doctrine of the survival of the fittest. As interpreted by the many it meant that the one who was strong enough to climb over his fellows was the one best fitted to live. It excused all manner of selfishness, rapacity, and crime. In business and private life the person who could not take care of himself went under, and many of us were declaring that it was all right. We had forgotten the

injunction, "We then that are strong ought to bear the infirmities of the weak, and not to please ourselves."

Are we so much better now in August, 1919? Has the baptism of blood which the world received gone far towards cleansing us? Looking around I can't see that we are so changed, as we were told through all those weary four years that we were to be. The old selfishness seems just as strong to-day as it did before. I can not see where people in masses are thinking of anyone but themselves, though occasionally individuals seem to have gotten the vision of what we should do.

The laboring class is lining up solidly for its rights, the farmers for their rights, the capitalists for their rights, the clerks for their rights and the employers for their rights, and never a one giving a thought to the

(Continued on next page).

## Canning Left-Over Vegetables

**M**IXED vegetables are attractive and economical in salads, omelets, escalloped dishes and to use as garnishes for meat dishes. If the small quantities left from packing the different vegetables are placed in one can, many desirable combinations can be made. A good combination during the early summer is young carrots, peas, string beans and young onions. A mixture which the fall garden might furnish is peppers, celery, onions and small lima beans. Do not use beets in such combinations, because they will discolor the mixture.

Corn seems to give the average home canner more trouble than any other product. It is especially important, therefore, that extreme care be used and that directions be carefully followed. Much depends upon the age and condition of the corn. Select the fresh, tender, juicy corn which has not reached the starchy stage. A little experience in selecting the ear and the ability to recognize corn that is just between the milky and dough stage are important.

Gather lima beans for canning when the beans are in prime condition for the table. The sooner the beans are canned after picking, the better the product. Blanch for three to eight minutes in live steam or boiling water. Very large lima beans are often canned with corn for succotash, where corn and beans mature at the same time.

Select small, tender wax or green beans for canning purposes. Beans which have grown within the pod to any size are difficult to can and the resulting product is not as satisfactory as one from younger beans. The sooner the beans are in the jar after picking, the better the flavor, and the more certain they are to keep. Wash, string and cut off the ends of the beans. They may be canned whole or cut in short lengths. Those cut diagonally are attractive in appearance.

All the vegetables are prepared separately as for canning and packed in layers in a well-boiled jar. Each layer should be packed as tightly as possible before the next is added. Fill jars with a brine. Put on boiled top and

rubber. Process in water-bath canner either 120 minutes one day or one hour on three successive days, or thirty-five minutes in steam-pressure cooker under fifteen pounds pressure.

#### Corn, Tomatoes and String Beans.

A corn, tomato and string bean combination is made by using one part of corn, one part of green string beans and three parts of tomatoes. The corn is blanched, dipped in cold water and cut from the cob. The string beans

are cut into convenient lengths and blanched for four minutes. The tomatoes are blanched from thirty to sixty seconds and cold-dipped. Remove the skin and core of the tomatoes and cut into medium-sized pieces. Mix the three vegetables thoroughly and pack the mixture in hot glass jars. Add a level teaspoon of sugar and one-half teaspoon of salt, and fill jar with hot water. Put on boiled top and rubber and process in water-bath canner either

120 minutes one day or one hour on three successive days.

#### Corn and Tomatoes.

Corn and tomatoes make a good combination to can. Blanch fresh corn on the cob five minutes, dip for an instant in cold water and cut from the cob. Scald tomatoes from thirty to sixty seconds and dip in cold water. Remove the skin and core. Chop tomatoes into medium-sized pieces. Mix thoroughly two parts of tomatoes with one part of corn. Pack the mixture in hot glass jars, add a level teaspoon of sugar and one-half teaspoon of salt to a quart. Fill jars with hot water. Put on boiled top and rubber and process (boil) 120 minutes in water-bath canner one day, or one hour on each of three successive days.

#### Concentrated Vegetable Soup.

An excellent concentrated vegetable soup can be made from any desired mixture of vegetables. A tasteful combination consists of one quart of concentrated tomato pulp (tomatoes boiled down until thick), one pint of corn, or tiny lima beans, one pint okra, and four teaspoons of sugar and salt mixture—made by mixing sugar and salt in the proportion of one-third salt to two-thirds sugar.

To make the tomato pulp, cook together three quarts of sliced tomatoes, one small chopped onion and half a cup of chopped sweet red pepper. Put through a sieve and remove seeds and skin. Return strained pulp to kettle and cook down to about the consistency of catsup. Measure, add the corn or beans and okra which has been prepared as for canning, with seasoning. Cook altogether for ten minutes and pack hot into jars which have been previously boiled fifteen minutes. Put on boiled top and cleansed rubber, partially seal and place on false bottom in water-bath canner with water to cover.

If the single-period continuous method of processing is followed, boil for at least two hours. If the intermittent boiling process is used, boil for one hour on each of three successive days. Before each subsequent boiling, the covers must be loosened and after each boiling the covers must be securely tightened again to make sealing complete.



There is no Law Against this Sort of Hoarding.

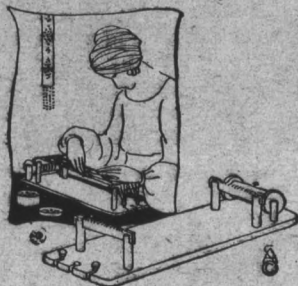


## The New Bead Work

SOME years ago a returned western traveler wore back a watch fob bought at an Indian reservation, the Mojaves it was. This was woven of beads, a fob about four inches long with a fringe making an extra inch, and an inch and a half wide. The ground work was of white beads and the designs—a butterfly and a conventional design—were woven in with dark green, light blue and yellow beads. We exclaimed at the ingenuity of the simple savage, and put the fob away for a curio.

The other day we walked down the street and suddenly rubbed our eyes. Was that our watch fob the dapper young chap was wearing? Close inspection showed it was not. The design in his was the symbol of the Ancient Order of Hibernians. Inquiries in a store disclosed the fact that the Indian bead work has now become civilized and been impressed into the making of belts, necklaces and all sorts of trinkets.

It seems it is very simply done, too. All that is required is a small loom like the one in the picture, time, pa-



tience, a few beads, skilful fingers and a sense of the artistic. If you are clever enough to make your own designs you are fortunate, for then you can have "something different." If you are not, a leaflet may be bought with the loom for ten cents, the loom is eighty-five cents. Here you will find suggestions for all sorts of color combinations and numerous designs to be worked out.

For your warp thread in weaving you can use either linen or cotton. If cotton is used choose No. 40 and wax it. Thread the loom, using one more thread than the necklace or fob or belt is to be beads wide. The warp threads should be cut twelve inches longer than the article to be made. In weaving you fasten the weaving thread which should be No. 70, to the extreme left warp thread. Pass the needle under the warp threads to the right, slip on as many beads as you are to use once across, press the beads up between the warp threads and again run the needle through them. This brings the thread back to the left side again, where you simply repeat the process. Be sure that in putting the needle through the beads the second time it goes above every warp thread. When the loom is woven full the completed portion may be wound on the spool, which pulls the warp threads up into position for further weaving.

Belts of this bead work are unusually pretty. A white background with lavender design in a Greek key, swastika, bow knot or star would be effective for wear with summer frocks. For an older person choose black for the background and silver or gold for the design.

One sees necklaces finished at the ends with tassels made of loops of the beads. About fifty beads will be required for each loop. A handsome necklace was made of black beads, with the pattern worked out in cut steel beads, which also formed the tassels. This would make a very acceptable gift for an older woman for wear with a dark gown or with a white blouse.

If you belong to the Epworth League, work in your Maltese Cross. Or the Christian Endeavor or B. Y. P. U. emb-

lem may be used if either of these societies claim you. Of course, your Masonic order emblem may be used, or perhaps the emblem of your high school or college society. There is no end to the designs you may utilize.

These necklaces and belts cost a pretty penny if someone else makes them for you. But the cost if you weave them yourself is comparatively small.

### LET'S ALL DO A LITTLE INVESTIGATING.

(Continued from preceding page).

other fellow, or making an effort to see the other side of the case. "I've got to look out for myself. Who is thinking about me?" is the general cry. The laborer demands a raise because living is so high. The employer gives it because he has to, then raises the price of his commodity. The farmer goes to buy machinery or fertilizer and finds it higher, his prices raise a cent to the buyer, who promptly tacks on five to the consumer, and another wage raise is demanded. And so it goes round and round in a merry circle. Vicious is the better adjective, but we might as well try to see the funny side of it. Many of the advances have not even this excuse. The price is simply raised because "everybody is doing it, and I might as well get my share while the getting is good." It is like the real estate men baldly claim, "A piece of property is worth just whatever you can get some sucker to pay."

I think perhaps the meanest excuse I have yet heard for the unwarranted robbery is that if money is plentiful enough for folks to go to shows and movies they might as well pay high prices for food and clothes. Why, forsooth, because a person spends ten cents or a dollar for pleasure, must he be asked double the price for a quart of milk or pound of meat? Yet I have heard this "logical" argument advanced by dealers who were defending their prices.

The fact of the matter is that we are all out after ours. And no amount of congressional investigation or agitation by prosecutors can entirely remedy the evil. "Out of the heart are the issues of life." And until our hearts get right, things will go on pretty much as they are. Laws may be made, but there is always a way to evade a law, and a lawyer who can be bought to show you how. DEBORAH.

### FROM ONE HOUSEKEEPER TO ANOTHER

Select the Finest Flowers for Seed. —If care is taken in selecting the seeds from the first and best flowers, the plants improve each succeeding year. A mistake is made when the first and best are cut and the inferior left for seeds. Poppies, phlox and verbenas should be selected in this way. Watch your flowers carefully, and they will improve year by year. Let the seeds get ripe and thoroughly dry in the pods. In winter when you have plenty of time, clean the seeds and get them ready for spring planting. —Mrs. J. J. O'C.

Cleaning the Sewing Machine. —Few things cause the woman on the farm more annoyance than a machine that has become clogged up and will not run. When this happens no amount of oiling will have any effect. If you have access to a bicycle pump and use it on different parts of the machine it will force out all particles of thread and dust. After you have used the pump fill your oil can with gasoline, flood every oiling place on the machine and run rapidly for a few minutes. Then oil the machine and you will find it works like new. —M. B. G.



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Woodward and East Grand River





# Our Boys' and Girls' Department

## The Farm Boy and His Tools

By E. L. Vincent

A MAN I know of a few days ago came clear across the state to do a piece of carpenter work. For some time he had been in the grocery business, and I wondered if he had kept the tools he used to have, and asked him about it. "Oh, yes," he said, "I've got my tools. I have kept those ever since I laid down the carpenter work."

That man was a farmer boy when he was young and began then to gather together the tools he loved so well. His father had very few tools, but he was pleased when his boy with his allowance and earnings, which were small in those days, bought tools one after another, until he had a very good kit. To this collection he added once in a while some tool; and while he was working in the store his mind kept going back to the work he so much more loved, and when the call came to build a house for a friend, he was ready to drop all and go back to the old home. And I know when the house is done it will be well done, for the farmer boy, now a man, long ago learned to use his tools right.

There is no finer thing than for every farmer boy to invest some of his spare money in good tools. I say good tools, because they are many which are not worth taking home. I have bought cheap screw drivers, for example, myself, and had the tip turn under pressure the very first time I used them. It is the same way with many other tools. They do not stand use. So it is far better to buy good ones while we are about it. It is money saved.

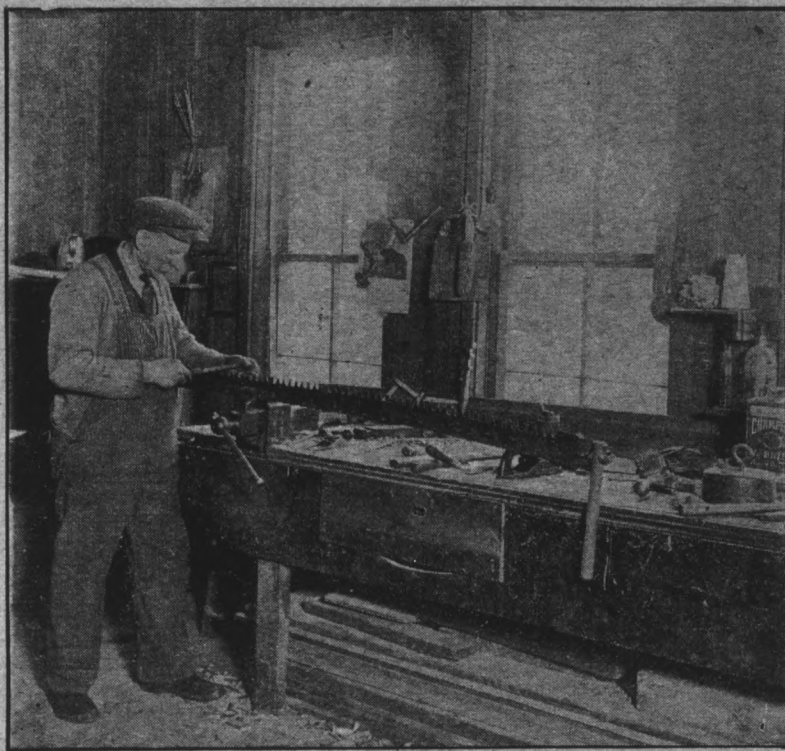
I wonder how many boys who read this have really mastered the art of keeping tools in good condition? It is easy enough to dull them—a nail or a stone and the trouble is done. But it is a different thing to undo the damage. Here is where the farmer boy may exercise all his skill to good advantage. On our farm we have a grindstone geared to the shaft of the milking machine, so that when we are milking, somebody may be grinding up any tools that need it. To do good work one ought to have a good light, so that he can see how he is coming on. If there is a big nick in a chisel, we will say, the boy may sharpen the tool up good in a little while. The steel ought to be held on the stone so that the bevel of the edge will be just as it was in the beginning. There may be some temptation to shorten the bevel up, so as to grind the nick out faster, but if we do that, we injure the working qualities of the tool. This is just as true of axes and other edged tools as of the chisel.

One of the most difficult pieces of work of this kind is filing a saw. A good way to begin is to take an old saw that may have seen its best days and hung round, doing nobody any good. For a small price you can get a good saw set. It may be you will need to have a little instruction as to the right way to use it, but after a bit of practice you can use it right. Then comes the filing. If you have no vise made for the purpose, you can take two thin pieces of board, put the blade of the saw between them with the teeth just above one edge, and fasten saw and boards in the large vise of the work bench and you are ready to begin.

The file used ought to be small, and the smaller the saw and the finer the teeth, the smaller should be the file. You will notice that each tooth has two

bevels. It is a good way to file all that slant one way, while the saw blade is as you first placed it in the vise, then turn it round and do the other bevels. Care needs to be taken while filing the bevel of one tooth not to let the file come over on the bevel of the next tooth and dull it instead of sharpening it. If the saw is rusty, a little kerosene oil dropped on the sides and rubbed hard with paper will help to take it off. Or a piece of fine sandpaper will do it more quickly.

Now, here are a few hints about the



general use of tools. If possible have a bench upstairs in some building. The wagon house may be the most convenient place. Over the bench put up a board shelf, with small holes in it, and into these holes set the lower end of the bits, gimlets and other tools for boring. Hooks fastened to a board on the side of the wall will hold the saws, drawshave and so on. Another shelf will take the planes where they will be handy.

Rust is one of the worst enemies of tools of any kind. So always put the tools you have used away with the metal perfectly dry. A piece of oiled cloth, kept handy by, and thoroughly applied, will absorb any moisture that there may be on the metal.

Never leave the tools out round the farm. It is a common failing with many to drop tools where they are used, forget them and never see them again, unless it be by chance. On every farm tools enough are lost and spoiled each year to keep the place well supplied with all needed tools.

Storms falling upon tools will soon ruin them. A rusty tool cannot be made to do as good work as it did when new. Even a dew will take the shine off the best steel. One night of lying on the earth will damage the metal perhaps beyond repair. You cannot rub, or scour or grind the original polish back on the tool.

Save pieces of hickory and ash and other hard wood and lay them away for handles to the tools which may get broken. Take the spare moments for replacing these handles. Father will appreciate it if you fix up any of his tools that may have been broken.

When at your jobs of grinding, think of mother's knives and give them a good edge. The best way to sharpen scissors is with a fine file. But wait till you have had some experience before doing this. Scissors are delicate instruments to put in order.

Think of your tools as your friends and treat them accordingly.

## Our Prize Contest

### FIRST PRIZE.

#### Kind of Stories I Like Best.

I have been reading the letters written by the boys and girls on the different subjects, and think they are very interesting. So I thought I would write one, too.

I like to read stories that are interesting and in which we may learn something; as in some fables that are written about animals. They teach us not to be boastful and always wishing that we were richer than others.

Then I think that stories which were written a long while ago about the people that lived then are very interesting.

They show us how the people lived and did their work. How different the children were brought up in those days from what they are now. And what strange things some of them believed in. They surely had a hard time getting along. We ought to appreciate what they did for us.

I like to read stories of adventure, too. About the knights. How brave they were, always helping the poor and trying to right the wrongs that had been done.

My, it must have been great for one knight to win over another at a tournament, and have the wreath put on

## A Junior Agricultural Club

By J. H. Brown

ONE of the Junior Agricultural Clubs of Calhoun county, during the war got into the game with considerable grit and enthusiasm. The picture shows up the bunch and their exhibit on the platform and in front of the blackboard.

We were asked to attend the exhibition and gave a talk to club members on scoring corn and potatoes. Even

continue to roost on the present high prices.

The boy at the left sat in his seat well back in the schoolroom during the afternoon exercises. The teacher was talking and everybody listening. Suddenly one chicken pried off one slat on top of the coop in the lower left corner and stuck its head out.

This little boy got excited inside,



the girls evinced great interest in this work.

The needlework display was fine in quality and the two little girls had become quite expert in a short time. The two little boys, if they keep on will no doubt become poultry experts and make lots of money, provided chickens push.



his head as the champion, like "Ivanhoe" did.

I also like stories written about nature. It is lots of fun to learn all about the different plants and flowers. Then I guess there is one more kind that we all enjoy, and that is fairy stories.—Ilah Bechtel, Middleville, Mich. Aged thirteen years.

#### HONORABLE MENTION.

##### The Kind of Stories I Like Best.

I like stories of Indian life which tell of their homes, their ways of hunting, fishing and trapping. The true Indian has an intimate knowledge of the habits of the birds and animals.

A lone Indian sent out into the wilderness without food, clothing or weapons can soon find all these, as a white man cannot. The best Indian story I ever read was an "Indian Winter."

I like stories of ancient history, especially the ones that tell about Pompeii and Herculaneum, which were buried by a terrible eruption of Mt. Vesuvius. It tells of how people were buried asleep in their beds, some in prison, in cellars, some trying to get away with their jewels and money be-

and a woman that were rich, and had lots of jewels. He went away to seek a new home, so he went a long way off and had a castle made for himself and wife, and they lived in the castle to the end of their lives.—Laura May Bartshe, Vicksburg, Mich. Age fourteen years.

#### SCHOOL CHILDREN'S FARM.

THE school children of Yellow Grass, Saskatchewan, have organized themselves for a remarkable experiment in cooperative farming. Recently they formed a company which they named the Cooperative School Association, all the stock of which was purchased by the boys and girls with their pocket money and savings.

Then they purchased an acre and a quarter of land from the Canadian Pacific Railway under its long term, easy payment plan. The cost was about \$35.00, ten per cent down and the remainder in twenty years at six per cent interest. The land is on the outskirts of the town and near the school. The children propose to plant their farm to potatoes this year and share the profits. All the labor will be supplied by the children.

"You can bet it won't take us kids any twenty years to pay for our farm," says Sandy Macdougall, aged fifteen, one of the directors in the association. "Plenty of farmers in western Canada have paid for their farms with one crop of wheat, and we propose to pay for our farm with one bumper crop of potatoes. When we begin to make money we will invest it in more land, and in a few years we expect to be running a regular man-size farm. Watch us."

MARK MEREDITH.

#### \$2,500 IN PRIZES FOR CALF CLUBS.

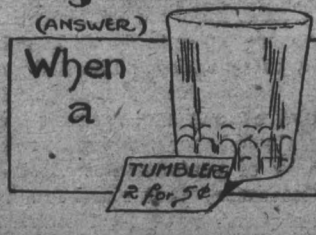
THE American Jersey Cattle Club has appropriated the sum of two thousand five hundred dollars for premiums to be given in boys' and girls' calf clubs for the year 1919. Seventy-five dollars of this sum will be presented to each of the first thirty-three clubs reporting to the Secretary of the American Jersey Cattle Club after the date of the publication of this notice. The clubs entitled to participate in this premium distribution are confined to those organized during the year 1919, and which consist of not less than twenty members each, who have purchased Jersey heifers. Said seventy-five dollars to be available for premiums for members of such calf clubs on such basis of distribution among its members as the calf club receiving the same may determine, either prior to or at the time of the holding of the show of any such club. Notify R. M. Gow, Secretary of the American Jersey Cattle Club, 324 West Twenty-third Street, New York City, if you desire to enter your club for such premium money. Each application will be stamped as soon as received at the club office, and the date such application is received will control in determining the first thirty-three clubs reporting.

#### TODAY'S RIDDLE

When is a pigeon like a glass?

(ANSWER)

When a



fore they were killed by falling rocks molten lava and hot ashes. Jailers stood at their posts until the last minute, and prisoners were not released from the stocks and chains.

I like stories of our own history, such as the "Southerner," which tells about the life of Abraham Lincoln, from his boyhood until his death.

I like Boy Scout stories. I like the war stories that have been printed in the Michigan Farmer, also the nature stories, especially "The White Rabbit." John O. Roberts, Breckenridge, Mich.

#### HONORABLE MENTION.

##### The Kind of Stories I Like Best.

The kind of stories I like best are, Uncle Tom's Cabin, Christobal, a Gay Charmer, and the Castle of Gems.

There are a lot of others, but it would take up too much room and lots of time.

I like Uncle Tom's Cabin because it tells about slaves and the way the people used to treat them, and why we should not have slaves nowadays.

Christobal is a very interesting story because it tells how poor people can have a jolly time, the same as other people can have a good time. Christobal was a little lame boy and did not have much of a home.

A Gay Charmer is an interesting story, because it tells about people that have a girl to be their own. They lived in what is called a Grange, the school that the girls went to was in the same building. The girls had good times in school and out of school.

The Castle of Gems is a very interesting story because it is about a man



## The Pipeless Furnace That is Easily Installed

**The Williamson is Easily Installed**—No floor or partitions to tear out. Only one opening in the floor required. No pipes to bother with.

**The Williamson Gives More Heat**—The recirculating air system and four-inch insulated cold-air jacket sends the maximum of heat into the house. Only enough warmth is retained in the basement to keep water pipes, fruits and vegetables from freezing.

**The Williamson is Guaranteed by Bond**—The liberal bond backed by this million-dollar company guarantees the Williamson to heat your home to an average temperature of 70 degrees, or money back. The firepot is guaranteed for five years.

**The Williamson Pays for Itself**—Its scientific design, the result of thirty years' experience, insures uniform heat throughout the house with minimum consumption of fuel. Will burn coal, coke, wood, lignite or gas. Pays for itself through fuel-saving.

Let the Williamson engineers show you the most economical way to heat your home. Send for free information blank and also receive free, illustrated copy of "Comfort at Low Cost," a remarkably informative book on home heating.

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#### Ring Necked Pheasants

We can now make shipments of our birds. They will lay next spring—are easy to raise and do not eat one-half as much as chickens. These birds are not subject to disease—are hardy and unrelated. You can sell their young and eggs at good prices—they are much more profitable than chickens.

Single Pheasants \$6.00 Each  
5 Hens, 1 Cock (Pen) \$30.00

#### Genuine Wild Mallard Ducks

Guaranteed to be from nothing but genuine Wild Trapped stock—not the coarse semi-wild strain. Will lay next spring. Fine eating—good decoys—and money makers.

Single Ducks or Drakes \$5.00 Each  
5 Ducks, 1 Drake (Pen) \$25.00

#### Bloomfield Giant Bronze Turkeys

We have some of the young for sale, from our wonderful 55 pound tom "BLOOMFIELD KING." Why not buy one of our fine extra toms and improve your flock?

Pullets . . . \$15.00 Each  
Cockerels . . . 20.00 to 35.00 Each  
Hens . . . 20.00 Each  
Toms . . . 35.00 to 50.00 Each

We are accepting orders now for eggs from our Pheasants, Wild Mallard Ducks, Turkeys and Single Comb Rhode Island Red chickens for spring delivery. Orders will be filled in the rotation that they are received.

**Bloomfield Farms**  
America's Largest Game Farm  
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Get your order in early and send check with it. Send for free descriptive booklet of instructions.

#### POULTRY

**Barred Rocks** Exclusively. Baby chicks all sold. Thanks to all our customers. Order early for next season. H. H. Pierce, Jerome, Mich.

#### HOMESTEAD FARMS

We want the farmer poultrymen and women of Michigan to know the Homestead Farms work: it is a work that unites the interests of people.

Every bird we send out is guaranteed to be true to representation; any bird not satisfactory may be returned.

**Pullets and Yearlings**—White Leghorn yearling Pullets in lots of 6, 12, 25 or 50. A limited number of Barred Rock spring Pullets.

**Cockerels**—Barred Rocks, White Rocks, White Orpingtons, S. O. Black Minorcas, S. O. and R. O. White and Brown Leghorns, Anconas.

**Quineas, Ducks, Geese**—White Pekin, Gray Tonlouso, Turkeys—Bronze, White Holland, Bourbon Reds, Rabbits—Belgians, New Zealand, Rufus Reds, Flemish Giants.

Please send for Fall Price List and for Spring Catalog, if you do not have one already.

**STATE FARMS ASSOCIATION,**  
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**Buff Leghorns**, and White Leghorns. 100 early hatched Cockerels from great laying strains \$1.50 each.  
Dr. WILLIAM SMITH, Petersburg, Mich.

**Barred Rocks** egg contest winners, eggs from strain with records to 250 a year. \$2.00 per setting prepaid by P. P. Circular frye.  
FRED ASTLING, Constantine, Mich.

**Fowler's Buff Rocks** Cockerels \$4 up. Utility eggs for hatching \$2.00 for 15.  
R. B. FOWLER, Hartford, Mich.

For sale "Buy the Best" eggs for hatching from 200 F egg strain Barred Plymouth Rock. \$2.00 per 15, \$5.00 for 45 eggs. H. B. PROCTOR, Grand Haven, Mich.

**March Hatched R. I. Red Cockerels** Both Combs. Write for prices and order early. Interlakes Farm, Box 39, Lawrence, Michigan.

**R. C. Brown** LEGHORNS, M. Pekin Ducks, W. Chinese Geese. Place orders early for young stock. Mrs. Claudia Betts, Hillsdale, Mich.

**S. C.** Brown Leghorns. Heavy laying strain. Cocks, cockerels and yearling hens for sale.  
Floyd Robertson, R. 1, Lexington, Ind.

**S. C. B. Minorcas.** Eggs from pen 1, \$3.00 per 15, from pen 2, \$2.00 per 15. Incubator eggs \$7.00 per hundred.  
R. W. MILLS, Saline, Mich.

Silver Golden and White Wyandottes young breeding stock after Oct. 1st. Choice cockerels \$5 to \$15. Write your wants now. C. W. Browning, R2 Portland, Mich.

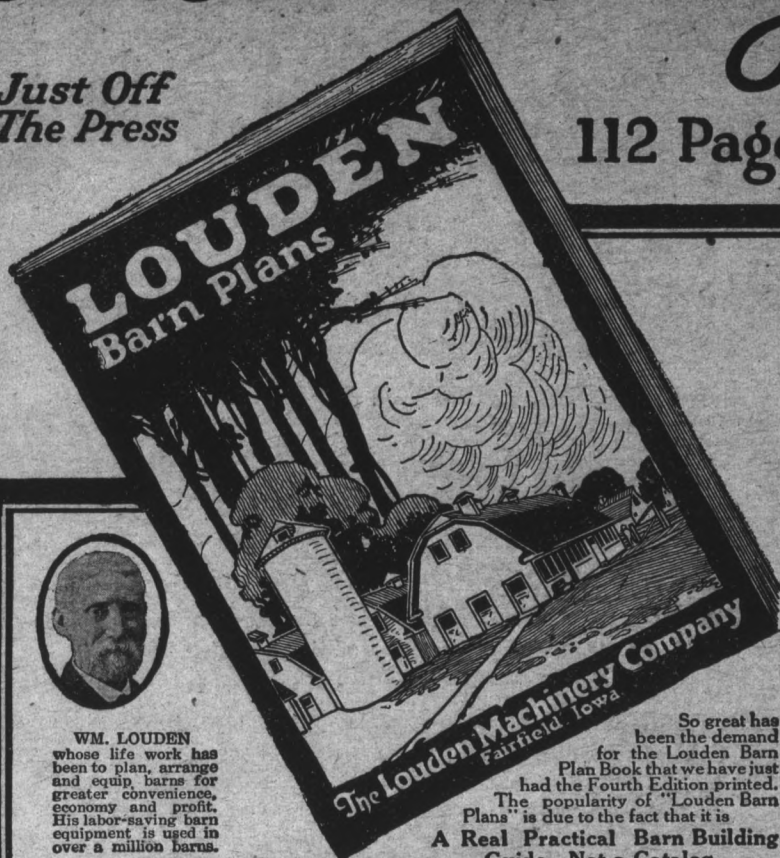
Additional Poultry Ads. on Page 251



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greater convenience,  
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**Here's Another Great Book You Need** The Louden General Catalog—224 pages. It tells how you can actually cut out half the labor in your barn every day in the year, bring up the milk yield of your cows, save feed, save manure, etc. Shows Louden Stalls and Stanchions, Animal Pens of all kinds, Feed and Litter Carriers, Water Bowls, Hay Unloading Tools, Power Hoists, Barn and Garage Door Hangers, Ventilators, Cupolas—"Everything for the Barn." Sent postpaid—no charge or obligation. Write for it.

We can save you a lot of trouble and without a doubt some money too, in any barn building improvements you have in mind. Write us about your needs—number and kind of stock you wish to house. We make no charge for suggestions and preliminary blue prints, and you will be under no obligation of any sort.

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## The Dairy Problem

(Continued from page 233).

Dairy farming is the bed-rock of the windows have been smashed out, farm fertility. That is a fact which cannot be controverted. How many times we have read that simple state-washed off the siding of the houses. The boards on the barns are many of them flapping in the winds. Fields, fences and orchards are fast going down hill. Why?

The owners of these farms thought they could keep up their farms by the use of commercial fertilizer and get along without doing work necessary on dairy farms. They sold their cows. For a few years they bought some commercial fertilizer. Then that became more expensive. There was a temptation to do without, and from that point on the road led down fast. There was no barnyard manure to use. Plowing under green crops seemed a useless waste. Soon the farm produced less hay. Revenue dropped off. Men either sold their places for what they could get or rented them and moved away to town to eat up the eggs they had been storing when the sunny days were with them. Renting proved unprofitable. Homes were left unoccupied. The freight went out in them and we have what is known as abandoned farms.

This picture is not overdrawn. All over the east there are scores of these farms that are lying idle, awaiting the time when a new order of things shall awaken them to old time prosperity.

So it seems to me milk prices must be advanced in the near future. Farmers have come to a time when they know very nearly what it costs them to make a hundred pounds of milk, and they will not keep on making it at a loss. Why should they? No other business man would long stay in the field after he had done his best to earn a fair profit and determined that it could not be done legitimately.

But as was stated just now, there will be a limit to the movement for higher-priced milk. Then what? Now is the time to anticipate that and prevent it from materializing. Let representatives of the producers, the dealers and the consumers meet and, like sensible, unselfish men settle upon a plan of procedure that will be fair and just to everybody. It can be done. Peaceful methods are far better than war. Is this visionary? Does it seem impractical? Justice and fair-dealing never were visionary or impractical. They never will be.

They never will be.

## The Question of Roughage

TODAY I received quotations of cottonseed meal, for delivery in October, November and December. All of these offers were above seventy dollars a ton at factory. Linseed meal is even higher, and cottonseed meal can be bought for immediate delivery for less than eighty dollars. Corn meal is selling here at four thirty per hundred and higher, according to where one buys it, and no grains are cheap.

Grain is going to be scarce and high this winter and there seems no likelihood of cheap grain for some time to come. The shipments of protein concentrates abroad will continue and we may expect no slackening in the demand during the coming months for dairy products are high enough in the old world to warrant the payment of very long prices for these feeds. Naturally, then, we turn to the consideration of the question of roughage for our cows. Talking with our most successful dairymen we find that all of them are heavy feeders of roughage. If we would get the most out of a cow, we must follow nature's way. That is, we must provide for her such feeds and such surroundings as are nearest in harmony with nature's plan for her development and her well-being.

The cow was made to consume large quantities of roughage. She will get along on a highly concentrated ration if we compel her to do so, but she prefers a bulky ration. The dairy cow of today is doing vastly more work than the cow of long ago, for man has bred and selected her for large things in the way of performance. It is therefore necessary that she have a much larger quantity of food nutrients to correspond with increased production,

but her ability to dispose of a great deal of bulk in the ration must not be overlooked. Our aim should be to provide a bulky ration, and still to furnish with it a sufficient amount of food nutrients to enable the animal to produce all the milk of which she is capable. Were we to feed her largely on straw, we should furnish plenty of bulk, but she could not give a normal amount of milk for she would not have anything out of which to make it. Were we to give her timothy hay in large quantities, and no other roughage there would still be no lack of bulk, but we should find our ration low in protein and lacking in succulence. While we might bring up the content of protein by nitrogenous grains, our feeds would still lack the succulent quality which is indispensable to the largest milk flow.

May I pause a moment to discuss the value of succulent feeds in the production of milk? Last summer a friend of mine who is one of the best dairymen I know was testing several cows for Register of Merit. One of these cows had produced 735 pounds of fat the previous year, and we were looking for much better things from her in this case, as she entered the period of lactation in far better condition, and her production during the first few months was largely increased. When August came, the pastures were worthless, and the ensilage was gone. All that hay and grain could do was done to keep her going right, but it was no use. Her production of fat fell to forty pounds in that month, but it came back during the last month of her year, when the silo was opened again, to fifty pounds and more. In this case, it was not the lack of

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"If I only knew of something to stop that Backache—help my Rheumatism—cure my Neuralgia, I would send and get it at once."

Get It! Gombault's Caustic Balsam will give you immediate Relief. A Marvelous Human Flesh Healer and a never failing remedy for every known pain that can be relieved or cured by external applications. Thousands testify to the wonderful healing and curing powers of this great French Remedy. A Liniment that will soothe, heal and cure your every day pains, wounds and bruises.

**Gombault's Caustic Balsam**  
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**It Helps Nature to Heal and Cure.** Penetrates, acts quickly, yet is perfectly harmless. Kills all Germs and prevents Blood Poison. Nothing so good known as an application for Sores, Wounds, Felons, Exterior Cancers, Burns, Carbuncles and Swellings.

"I had a bad hand with four running sores on it. The more I doctored the worse it got. I used Caustic Balsam and never needed a doctor after that."—Ed. Rosenberg, St. Ansgat, Ia.

**Mrs. James McKenzie, Edina, Mo., says:** "Just ten applications of Caustic Balsam relieved me of goitre. My husband also cured eczema with it, and we use it for corns, bunions, colds, sore throat and pain in the chest."

**A Safe, Reliable Remedy for Sore Throat, Chest Cold, Backache, Neuralgia, Sprains, Rheumatism and Stiff Joints.** Whenever and wherever a Liniment is needed Caustic Balsam has no Equal.

**Dr. Higley, Whitewater, Wis., writes:** "I have been using Caustic Balsam for ten years for different ailments. It has never failed me yet."

A liniment that not only heals and cures Human Flesh, but for years the accepted Standard veterinary remedy of the world.

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food nutrients that diminished her milk flow, but the absence of succulent feeds.

During the last few days I have been riding with our county agent, rounding up the members of our cow-testing association for another year's work. In this connection it has been my privilege to talk with a number of good dairymen. We have had a dry season, and pastures are practically gone, but wherever there is a summer silo, the condition of the pasture is not worrying the people at all. If we have rough land that is not suited to the growing of crops, we can get something from it in pasture, even though it may not last throughout the season, but we can not afford to pasture valuable land that is adapted to the growing of general farm crops. We can grow from ten to twenty tons of ensilage on an acre of good land, liberally fertilized, and this amount would feed from three to six cows all summer, while one cow would require from one to three acres of this land on which to live comfortably if it were pasture. It is, of course true, that while the grass was fresh, she would require no other feed, and if fed on ensilage she must receive some nitrogenous feeds to supplement her ration, but there can be no doubt that one will receive much more by tilling valuable lands than by pasturing them.

No dairyman should forget the worth of common red clover. Clover hay, cut at the right time, and properly cured is of great value in the ration of a dairy cow. When we consider what clover does for the soil—how costly is nitrogen when we buy it in commercial fertilizer, and how cheaply we can grow it in the clover plant, it makes us feel anew the importance of getting a good stand of clover, and makes us miserable indeed when we fail, as many of us have in this unusually dry season. There is just one kind of roughage that excels clover, and that is alfalfa. I meet hundreds of good men every year, who have not yet found out that alfalfa can be grown in Michigan successfully. The writer lacked enough hay to carry the cows through the winter, and so he bought the first cutting on five acres of alfalfa. This field had been yielding good crops of this valuable hay for five years, and this year we cut nine tons, lacking three hundred pounds from it the first time.

No dairyman can afford not to fit a portion of his land for alfalfa unless he is certain he cannot grow it, and he ought not to give up too soon. There are few valuable farms in the state that will not grow this important crop, if properly prepared. A few years ago we had a meeting in our neighborhood and a little alfalfa club was formed. A man in the employ of the state went over a certain field that day and was not very hopeful about the future of the alfalfa that had been sown there a few weeks before. This year that alfalfa yielded more than two tons to the acre to the first cutting, and though the dry weather injured the second crop, there will be a lot of good hay harvested there yet this season.

Some have talked a good deal about the foolishness of trying to get men to grow alfalfa, when so many failed, but I doubt if many of these objectors would feel like saying much they could see the results of intelligent efforts in this line. There is a lot of land in this county that will not grow alfalfa until it is limed, and some of it needs a good deal of lime, but how much lime can one afford to draw and spread upon an acre, if it will produce two and a half tons of this most valuable hay at the first cutting, and two more cuttings before the season is over?

Alfalfa is the key to the situation, if one is after great records in dairy production. I have talked with many good dairymen—some of them having national reputations as breeders of

dairy cattle, but I have never talked with one, who had made a great success, who did not attribute it largely to the presence of alfalfa in the ration. With alfalfa, with good clover and with plenty of ensilage, winter and summer, the question of roughage for our cows is settled, and the foundation of our success in dairying is built.

W. F. TAYLOR.

#### NATION-WIDE DRIVE FOR BETTER STOCK.

(Continued from page 230).

has been making an analysis of live stock sentiment as expressed in the farm press and in correspondence received in its various offices. Of all the topics discussed the need for a better quality of domestic animals has been pre-eminent. To make the crusade against scrub live stock most effective the department asks for constructive ideas and suggestions from all sources. The following classes of live stock are to be included in the campaign for improvement: Cattle, horses, asses, swine, sheep, goats and poultry.

In spite of the conspicuous merits of the task about to be undertaken there are also a number of obstacles. It is recognized that sentiment in favor of pure-bred sires, while strong, is by no means unanimous. To win the support of those who, through lack of interest or opposition, fail to take their part in the crusade against scrub live stock is one of the problems to be met.

The cost of desirable pure-bred sires is another important factor which has long been an obstacle to live stock improvement. Coöperative ownership divides the expense considerably, and the increased value of the young stock raised also helps to overcome that objection. In addition the campaign is expected to stimulate a greater production of pure-bred breeding stock of good quality.

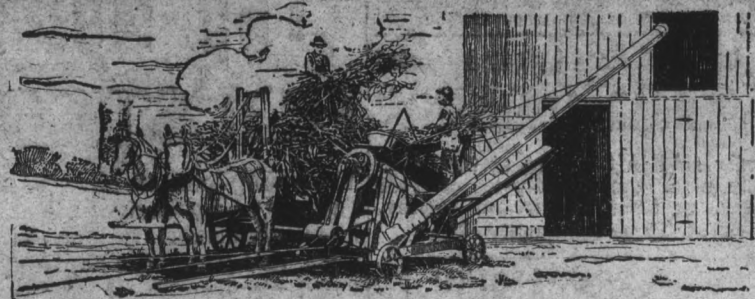
The question of controlling the spread of live stock diseases when animals are transferred from one herd to another or are used in community circuits, is still another problem. This matter, however, can be handled by vigilance in field inspection and by the adoption by breeders of well-recognized preventive measures.

There are other problems also more or less knotty, but not presenting difficulties of an insurmountable character. In connection with the drive on scrub sires there will also be waged a campaign against the "scrub pure-bred," as it is called, in the endeavor to eliminate, as breeding animals, pure-breds of inferior quality. It will be observed that the plan in no way interferes with any work in live stock improvement now being conducted, but instead it is expected to make all the work more definite and effective by providing official recognition for progressive breeders, including members of boys' and girls' clubs. Friendly competition is expected to spring up among communities and entire states, each of which will seek to excel in the rate of live stock progress.

APPLE BOXES ADVANCE TO 24c.

**A**LLEGING that recent advances in wholesale lumber prices have necessitated the move, fruit box manufacturers have advanced prices four cents per box, making the ruling quotation twenty-four cents each. This is double the figure charged three years ago and ten cents over last year's prices. Some big shippers are still receiving boxes on contracts made at last year's figure.

Western growers are said to be hard hit by the advance, as few of them had contracted for boxes owing to the high prices. It is said Yakima growers will pay \$100,000 more for boxes than they expected. The consumption in the valley is said to be five million boxes yearly. Some large growers produce their own boxes.



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**D**EERING and McCormick huskers and shredders insure the farmer all the feeding value his cornfield contains. This value is largely represented in the stalks, husks and leaves. Shredded by a Deering or McCormick these make prime roughage with high feeding value.

Deering and McCormick huskers and shredders do effective work under a wide range of conditions. The husking rolls have ample capacity for both large and small ears, handling them without shelling the corn. The shredder head is so constructed that the fodder is left in good condition, palatable and nutritious.

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By Special Delivery Parcel Post, postage paid 20 different thoroughbred breeds, Utility & Exhibition grades. Live delivery guaranteed. Capacity 100,000 weekly. Catalog free. Nabob Hatcheries, Gambier, Ohio.

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## BREEDERS' DIRECTORY

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## A bull calf, sired by our imported "EDGAR of DALMENY"

recently sold in Scotland at the Perth  
Bull Sale for the record price of 2,100  
guineas, or \$10,584.00 in our money.  
This goes to show the quality of the

### ABERDEEN ANGUS

that Mr. Scripps is breeding. He enjoys seeing  
good stock on "Wildwood" and believes that  
THE BEST IS NONE TOO GOOD.

"Edgar of Dalmeny" won the Michigan Grand  
Championship last September at the Michigan  
State Fair and was a winner in his class at the  
Chicago International last December.

We have a few females with calves at foot and  
re-bred to "Edgar of Dalmeny" that Mr. Scripps  
has consented to sell to reduce the fast growing  
herd.

### WILDWOOD FARMS

ORION, MICHIGAN

W. E. SCRIPPS, Prop., Sidney Smith, Supt.

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TYPE—QUALITY—BREEDING

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A few bulls (no females) for sale

WOODCOTE STOCK FARM, Ionia, Mich.

Cloverly Angus Bred cows, heifers and bull  
calves of good breeding.  
GEO. HATHAWAY & SON, Ovid, Mich.

### Registered Guernseys

Choice May Rose Bull Calves—at prices you can  
afford to pay.  
J. M. WILLIAMS, North Adams, Mich.

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## GUERNSEYS

Just two young yearling bulls left,  
ready for service. Come and look them  
over quick, or write. They are the  
good ones. Priced to sell.

AVONDALE STOCK FARM,  
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Guernsey Pure Bred Bull Calves from one to  
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GUERNSEYS BULL CALVES  
Containing blood of world champions.  
HICKS' GUERNSEY FARM, Saginaw, W. S. Mich.

GUERNSEYS must reduce herd, so offer  
a few choice females of  
Glenwood breeding also bull, all stock of A. R. breeding  
herd tuberculin tested.  
T. V. HICKS, Battle Creek, Mich.

For Sale: Guernsey bull calf fawn and white, 10  
months old, a beauty, Nancy's Sequel 56738; Sire,  
Halcyon Sequel 22326; Dam, Nancy's Nancy 64002.  
Dr. W. R. Baker, 1380 West Fort St. Detroit, Mich.

Guernsey Bulls For Sale—St. Austell Dal-  
meny, 43028; born December,  
1915. Sired by Don Diavolo of Linda Vista; Dam Lang-  
water Suffragette, A. R. 2346 Glass A 555 8 butterfat.  
Also Niagara 2nds Duke, 55564; born December, 1917.  
F. E. Robson, Room 307 M. O. R. R. Depot Bldg. Detroit.

\$75 gets 1 1/2 mo. old gdson Maplecrest Korn. Heng. and  
27 lb. daughter of Johan Heng. Lad. and 18.48 lb.  
daughter of Cal. Jane Paul A. Dam is my best milk-  
er. Terms. M. L. McLAULIN, Redford, Michigan.



\$150,000 For Prizes,  
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Breeders of Holsteins unanimously voted  
to quadruple the fees for recording trans-  
fers of their cattle sold, and spend the in-  
come therefrom to place the merits of this  
greatest of dairy breeds before the public.  
If interested in

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Send for our booklets—and inform yourself  
on how to make money in breeding dairy cattle  
THE HOLSTEIN FRIESIAN ASSOCIATION  
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## The Traverse Herd

We have what you want in BULL CALVES, the  
large fine growthy type, guaranteed right in  
every way. They are from high producing A. R.  
O. ancestors, Dam's records up to 80 lbs. Write  
for pedigrees and quotations, stating about age  
desired.

TRAVERSE CITY STATE HOSPITAL  
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## THE HOLSTEINS

At Maple Avenue Stock Farm are under Government  
supervision. The entire herd have just been tuberculin  
tested and not one reactor. A good place to buy that  
bull you are looking for, and I have two very fine,  
richly bred, and splendid individuals ready for any  
amount of service. I want to answer any question  
you may ask about them.

L. E. CONNELL, Fayette, Ohio

NO more bull calves to offer until next fall. Place  
your order for one from next fall's crop. My herd  
is on the state and federal accredited herd list.  
A. F. LOOMIS, Owosso, Mich.

## "Top-Notch" HOLSTEINS

The young bulls we have for sale are  
backed up by many generations of  
large producers. Buy one of these  
bulls, and give your herd a "push".  
Full descriptions, prices, etc. on request.

McPherson Farms Co., Howell, Mich.

## "Winwood Herd"

REGISTERED

Holstein-Friesian Cattle

Sire in Service

FLINT MAPLECREST BOY

His sire is Maplecrest Korndyke Hengerveld. His  
three nearest dams each over 30 lbs. of butter in 7  
days. His dam and granddam both made over 1232 lbs.  
of butter in one year. It is the yearly cow we are  
looking for to deliver the goods. Flint Maplecrest  
Boy's Dam is Gluck Vassar Bell, 30.57 lbs. of butter  
in 7 days and 121 lbs. in 30 days. Her butter fat test  
is 5.27. We have a few choice bull calves about ready  
for service and one or two ready. Remember we are  
breeders and not dealers in cattle. Our price is right,  
breeding considered. Write us your wants, or come  
and look this herd over before you buy, and see for  
yourself. We will be glad you came. Herd tuberculin  
tested.

JOHN H. WINN, Inc.

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Reference Roscommon State Bank.

## Wah-Be-Me-Me Farms

Pure Bred Registered

## Holstein-Friesian Cattle

Herd Headed by  
Segis Pontiac De Nijlander

A 32 lb. grandson of Michigan's great 35 lb. champion  
cow, Pontiac De Nijlander. His dam, Oak Valley  
Korndyke Beets Segis Fan, 32.06, also a Michigan  
prize winner last year and a prize winner in the Na-  
tional Ass'n. all classes, as a 4 year old last year. Her  
dam is a granddaughter of King Segis and as a 5 yr. old  
has 731.5 lbs. milk, 29.47 lbs. butter in 7 days and 2948.4  
lbs. milk, 116.9 lbs. butter in 30 days. Segis Pontiac De  
Nijlander's dam as a four year old (she is 5 yrs. now)  
made 1221 lbs. butter and 2721 lbs. milk in 30 days.  
Write for list of bull calves from 18 lb. 2 year olds to  
over 30 lb. dams. Have a five year old son of Hag Apple  
Korndyke 8th, a half brother to the \$125,000 bull for  
sale. Also Big Type Poland China hogs sired by a litter  
mate to the Illinois Grand Champion. Albert G. Wade,  
Prop. White Pigeon, Michigan.

A Good Note accepted in payment of finely bred reg-  
istered Holstein bull calves. Quality  
of the best, and at prices within reach of all. Write.  
GEO. D. CLARKE, Vassar, Mich.

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100--REGISTERED HOLSTEINS--100  
When you need a herd sire remember that we  
have one of the best herds in Michigan, kept un-  
der strict sanitary conditions. Every individual  
over 6 mos. old regularly tuberculin tested. We  
have size, quality, and production records back-  
ed by the best strains of breeding.

Write us your wants.  
R. BRUCE McPHERSON, Howell, Mich.

For Sale, Holstein bull, Emperor Of Mapleside. No.  
181023. Three and one-half years old.  
Sire, Johanna Korndyke Dekol, 41 A. R. O. daughters,  
Dam, Oslamity Wayne Paul, 30.25 lbs. 7 days, 904 lbs.  
346 days, test 4.48%. Bull easily handled, is nearly white.  
Sold to avoid in-breeding. Breezy Point Farm,  
Ironton, Mich.

Registered Holstein Bulls 10 months old.  
Borns 4 months old, price \$80 each. Merle H. Green,  
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LIGHT colored Reg. Holstein Bull 15 mo. old. Sure  
breeder. 30 lb. Pontiac breeding. Priced to sell.  
B. B. Reavey, Akron, Michigan.

REGISTERED heifer and bull calves, of the best  
breeding in Holsteins for sale. Special price on 2  
heifers and bull. C. H. GIDDINGS, Gobleville, Mich.

*Would you like to own  
a Jersey Bull of  
Majesty and Financiering  
blood lines backed by  
dutter records that  
bring profits?*

We Have Them

BROOKWATER FARM, Ann Arbor, Mich.  
Herbert W. Mumford J. Bruce Henderson  
Owner Manager

LILLIE Farmstead Jerseys. A few heifers bred to  
freshen this fall, also yearling heifers; and two or  
three R. of M. cows, Colon O. Lillie, Coopersville, Mich.

BUTTER BRED JERSEY BULLS  
CRYSTAL SPRING STOCK FARM,  
Silver Creek, Allegan County, Michigan.

Maple Lane R. of M. Jersey herd. Bull and heifer  
calves sired by a nephew the new World's  
Champion, Sophie's Agnes. Also R. O. Red eggs and  
chix.  
IRVIN FOX, Allegan, Mich.

The Wildwood Jersey Farm  
Bulls for sale by Majesty's Oxford Fox 134214 and Em-  
inent Lady's Majesty 150934, and out of R. of M. Ma-  
jesty dams. ALVIN BALDEN, Capac, Mich.

For Sale Registered Jersey bulls ready  
for service and bull calves.  
SMITH & PARKER, R. 4, Howell, Mich.

### JERSEYS FOR SALE

Two young cows due to freshen in Oct., one bred heif-  
er due to freshen in Dec., two heifer calves dropped  
last Dec. All are recorded or eligible. No bulls or bull  
calves at present. Will ship C. O. D. Newman's Stock  
Farm, Marlette, Mich. R. No. 1.

## Herefords

20 cows and heifers for sale.

ALLEN BROS., Paw Paw, Mich.

Herefords Polled and Horned, blood lines  
embrace Fairfax. Polled Per-  
fection and Prime Lad 9th breeding. Prices reasonable.  
COLE & GARDNER, Hudson, Mich.

Herefords Bob Fairfax 494027 at head of herd.  
Stock for sale, either sex, polled or  
horned, any age. Priced right. EARL O. McCARTY,  
Sec'y. H. B. Ass'n. Bad Axe, Mich.

## Harwood's White Faces

Owing to labor shortage will sell one  
half my herd, consisting of 120 head of  
Reg. Herefords, yearling and two year  
old heifers, cows with calf at side, re-  
bred to ton bull. Ten short yearling  
bulls. Priced right for quick sale.

JAY HARWOOD, Ionia, Mich.

Hereford Bulls Just two yearlings left. Head-  
header quality. You will buy  
on sight at the price. E. J. Taylor, Fremont, Mich.

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Registered bulls, cows and heifers. Good Scotch and  
Scotch-Topped for sale. In prime condition. Modern  
sanitary equipment. Herd under state and federal  
supervision. Farm 10 minutes from N. Y. C. depot.  
1 hour from Toledo, Ohio. Automobile meets all  
trains. Write.

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Shorthorn Cattle of both Sex for Sale  
W. W. KNAPP, Howell, Michigan.

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HOME OF THE MICH. CHAMPIONS  
We offer for sale a few good dual pur-  
pose cows with calves at foot. Also  
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C. H. PRESCOTT & SONS,  
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Shorthorns Scotch and Scotch Topped cows and heif-  
ers, priced right. Come and see them or  
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For Sale Shorthorns of Quality Scotch and  
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Hope, Avondale, Maxwallow Sulton and White Hall  
Sulton. Model Type, by the Oscola Co. Shorthorn  
Breeders Ass. John Schmidt, Sec. Reed City, Mich.

Scotch Topped Cows For Sale. Bred by the Mich.  
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Shorthorns New list, 27 bulls; 28 females. Feb. list  
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The Kent Co. Shorthorn Breeders have both males  
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L. H. LEONARD Sec., Caledonia, Mich.

Milking Shorthorns of best Bates breeding and  
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Bates Shorthorns Three extra fine cows  
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SHORTHORNS A young Mary cow and  
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ale, Louis Bubbitt, Williamston, Mich.

Meadow Hills Shorthorns—For sale females  
of all ages, in-  
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ready for service. Geo. D. Doster, Doster, Mich.

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Special Offer Shorthorns—Cows \$250 to \$300.  
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Red Polled Bulls For Sale  
also cows and heifers. G. A. Calhoun, Bronson, Mich.

Registered Red Polled herd bull for  
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For Sale, Berkshire boar, Emancipator's Master.  
Epochal Emancipator. One  
year old, well grown, good type. If in need of a boar,  
don't miss this opportunity of getting some of this  
famous blood in your herd. Breezy Point Farm,  
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Registered Berkshire Boars: ready for service. A few  
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E. D. REYDENBERG, Wayland, Mich.

Attention Breeders and Farmers Now is the  
time to buy  
that Duroc Boar for fall service. We have some  
Corkers. March pigs will weigh 100 lbs. July 1st.  
Inspection Solicited. Prices very reasonable.  
RUSH BROS., Oakwood Farm, Romeo, Michigan.

DUROC JERSEYS  
Fall pigs either sex also spring pigs pairs not akin,  
Sired by the Grand Champion and Junior Champion  
boars.  
F. J. DRODT, R. 1, Monroe, Mich.

DUROC SOWS  
sired by Walt's King 2349, the sire of 1st. prize win-  
ners last year, and bred to Orion's Fancy King the  
real big type Duroc. NEWTON BARNHART, St.  
Johns, Mich.

DUROC JERSEYS  
OAKLEY U. EDMUNDS, Hastings, Mich.

### Registered Duroc Boars

We have a choice lot of spring boars, sired by Michigan  
Cherry Col. No. 118473. Ira Jackson selected this boar to  
head our herd. Our prices are within every farmer's  
reach. The Jennings Farms, Bailey, Mich., R. F. D. No. 1

DUROC Jersey spring boars sired by Orion Cherry  
King Col. 2nd. with size and feeding qualities.  
W. O. Taylor, Milan, Michigan.

8734 Hampshires recorded from Jan. 1 to Apr. 1, '19.  
Did you get one? Boar pigs only for sale now.  
JOHN W. SNYDER, R. 4, St. Johns, Mich.

### THE WORLD'S CHAMPION

big type O. I. C. S. Stock of all ages for sale. Herd  
headed by Calloway Edd, the World's Champion O. I.  
C. boar assisted by C. O. Schoolmaster, Grand Cham-  
pion boar of Michigan, New York and Tennessee state  
fairs. Also, C. G. Giant Buster, undefeated Senior  
boar pig wherever shown and Grand Champion of Ok-  
lahoma state fair. Get our catalogue of Crandell's  
prize hogs, Cass City, Michigan.

O. I. C. One very choice 9 months old boar and  
spring pigs sired by Prandell's Big Bone,  
(63928), Glenwood Stock Farm, Zeeland, Mich.

O. I. C. S. Big type boars of April and May  
farrow.  
G. P. Andrews, Dansville, Mich.

## Shadowland Farm

O. I. C.'s

Bred Gilts 200 to 300 lbs. from prize win-  
ning stock. A few fall year-  
lings and 2 yr. old sows, big type, growthy boars  
of all ages, guaranteed as breeders. Everything  
shipped C. O. D. Express paid and registered in  
buyer's name. J. CARL JEWETT, Mason, Mich.

O. I. C. S. Bred gilts all sold. Plenty of spring  
pigs good enough to ship C. O. D.  
F. O. BURGESS, R. 3, Mason, Mich.

O. I. C. S. 2 Choice Yearlings Boars and  
Spring pigs.  
Clover Leaf Stock Farm, R. 1, Monroe, Mich.

O. I. C. S. One very good yearling boar, and this  
spring pigs to offer, registered free. 3/4  
mile west of Depot. Citizens Phone 124.  
OTTO B. SCHULZE, Nashville, Mich.

O. I. C. Choice bred gilts due to farrow in  
Weber Bros. Registry furnished.  
Weber Bros. Royal Oak, Phone 408.

O. I. C. S. One extra good fall boar and spring pigs  
for sale. Stock registered free and guar-  
anteed satisfactory. John C. Wilk, R. 2 Alma, Mich.

For 25 Years We have been breeding Big  
Type Poland China hogs  
of the most approved blood lines. Our new herd boar  
"Michigan Buster" is a mighty good son of the great  
"Giant Buster" dam "Mouw's Miss Queen 2." Some  
breeding! Litter of 14. We are offering some sows bred  
for fall farrow. J. C. BUTLER, Portland, Mich.

**Raise Chester Whites**  
**Like This**  
the original big producers

I HAVE started thousands of breeders on the road to  
success. I can help you. I want to place one hog from  
my great herd in every community where I am not already  
represented by these fine early developers—ready for market at six  
months old. Write for my plan—"More Money from Hogs."  
S. S. BENJAMIN, R. F. D. 10, Portland, Michigan

## Big Type Poland Chinas

Sired by Smooth Mastodon a son of A's Masto-  
don and litter mate to the Illinois Grand Cham-  
pion. Boar pigs and gilts. Bred sows from above  
sire and Big Bob dams, the big boned, deep, long  
bodied kind at farmer's prices.

Wah-be-me-me Farms  
White Pigeon, Michigan.

### O. I. C. and Chester White Swine

Strictly Big Type with quality. Spring pigs of March  
and April farrow. A choice lot of boars. Will only  
spare a few more gilts at present. Will ship C. O. D.  
and record them free.  
Newman's Stock Farm, Marlette, Mich. R. No. 1.

Ohio State Fair 1st. premium big type  
Poland China yearling boar  
for sale. Write for pedigree and price. Lone Cedar  
Farm, Pontiac, Mich.

LARGE Type P. C. the largest in Mich. Springboars  
now ready to ship. Boars for the breeders and  
boars for the farmers. Come and see the real large  
type with quality. Free livery from Parma furnished  
visitors. Look up my exhibit at the Great Jackson Co.  
Fair, Sept. 8th to 12th, expenses paid if not as adver-  
tised. W. E. Livingston, Parma, Mich.

Big Type Poland Chinas with quality. Pigs for  
out of Upome Matron 240346, and by Upome Lad  
90565, out of Eureka Giantess 241026. New herd header  
B's Bonanza Joe 100927, by Bower's Mammoth Joe  
7441. G. A. BAUMGARDNER, R. 2, Middleville, Mich.

L. S. P. C. Boars all sold. A few nice gilts  
bred for fall farrow.  
H. O. SWARTZ, Schoolcraft, Michigan

MICH. Champion herd of Big Type P. C. Nothing for  
sale but fall pigs; orders booked for spring pigs.  
E. R. LEONARD, St. Louis, Mich.

Fall gilt will farrow in Sept. \$100, and yearling sow  
that had 8 pigs spring will farrow in Sept. \$150.  
O. E. Garnant, Eaton Rapids, Mich.

Big Type P. C. Choice bred sows from Iowa's greatest  
herds, the big bone prolific kind with size and  
quality. E. J. MATHEWSON, Burr Oak, Mich.

Big Type Poland's all sold out, nothing for sale at  
present. Booking orders for spring pigs. Thanking  
my customers. L. L. Chamberlain, Marcellus, Mich.

Big Type P. C. Spring Pigs  
Either sex. A. A. WOOD & SON, Saline, Mich.

B. F. P. O. Some of the best males I ever raised. Two  
October Boars extra good. April pigs weight 100 lbs.  
Price reasonable. JOHN D. WILEY, Schoolcraft, Mich.

Large Type P. C. Nothing for sale now. Will be in mar-  
ket with better than ever this fall. If herd stuff  
counts. W. J. HAGELSHAW, Augusta, Mich.

Miller Meadows, L. T. P. C. Raised 68 spring pigs  
from 6 sows. Write for Sept. prices. 2 1/2 miles  
west of Marshall. Clyde Weaver, Ceresco, Mich.



## Exposes Cole's Tests

(Continued from page 230).

tion that he might have that affected the records of the association. Mr. Reynolds with Mr. Williams went and saw Mr. Cole who they reported was perfectly willing to tell all he knew about it, and just what he had done. Mr. Cole agreed to come to the meeting of the executive committee in Chicago on the fourth and fifth, and did come there. There, in the presence of the entire committee and a stenographer, he went on and told his story of the testing that he had done where he had started in the state of New York some years ago, went into his personal history, described many of the animals that he had tested at the Cabana Farm, explained fully how he had helped the cows, as he had described it, by 'putting cream in the milk. He told who was familiar with what he was doing, to whom he had imparted the knowledge of the way that the high records were made, and who he had helping him. He expressly stated, however, that Mr. Cabana had no knowledge whatever of what was going on. He described the large bonuses he received for making the records running into the thousands of dollars, of which he received two-thirds and Mr. Nieman, in charge for Mr. Cabana, received one-third. In one particular case the bonus was \$3,000 for a single record, in which case he had \$2,000 and Mr. Nieman \$1,000.

This statement, which took a large portion of a day, was reduced to writing, signed, and sworn to, and the committee at that time decided that these persons whose names had been mentioned in connection with this, who owned cows whose records Cole claimed were fraudulently made, should be notified before the board took any action, and they were telegraphed and requested to meet at Cleveland, to which place the committee adjourned to meet on the sixth.

At the adjourned meeting in Cleveland Mr. Cabana came before the executive committee, told them how surprised and grieved he was that such a thing should have taken place, and that it was absolutely without his knowledge except as to the bonuses. He stated that he had paid these bonuses because others had offered Cole the same amount, and that he felt with the large herd he had he was in position to pay as much as anybody for making records.

Mr. Nieman came before the committee, denied all knowledge of the fraudulent record episode, but did admit that he had been receiving one-third of the bonus as described by Cole.

Mr. Brooks, who had been associated with Mr. Cole in the making of records and who Mr. Cole claimed he had advised of the manner in which they were made, and the scheme by which they helped the cow produce the results, and who lived at Cole's house, claimed that the records he made were all right, that he never knew anything about Cole making any fraudulent records, that so far as he knew all the records were straight.

Mr. Bernhard Meyer, of Finnerne, New Jersey, appeared before the committee, chagrined and humiliated because of what Cole stated had taken place, while testing certain cows recently for him, but he had no knowledge of the facts, and the only thing that he knew about the way the cow had been tested was what Cole said about it.

Several of the persons notified did not appear, and as the time was short it was thought before acting the executive committee should give them further opportunity, and in the meantime get what further testimony was obtainable. The committee adjourned to the meet on the twenty-fifth, at which time final action will probably

be taken by the executive committee. The committee realizes, and the breeders will readily appreciate, the tremendous scope and influence that the action of the executive committee or board of directors is bound to have, not alone on the animals whose records may be expunged, but the offspring that have been sold in practically all the states. Thousands and thousands of dollars have been paid for the offspring because of the record of the dam, and calves of the offspring have been sold at large prices because of the record of the grandam, and the effect is already apparent in two or more generations.

The executive committee also realizes that the Holstein-Friesian Association of America is a Record Association, that one of its records is that of advanced registry; that the maintenance of the accuracy of these records are the reasons for its life, and that while the expunging of frauds from our records may bring disgrace, anxiety, and loss to some of our breeders the necessity for quick and accurate action on the part of the executive committee or board of directors is conceded by all. The only question in the mind of any officer or member of the board of directors is what is the right in the premises, what does justice, equity, and good conscience demand, and that action will be taken.

There can be no possible question about the necessity of expunging records known to be fraudulent. The injury and wrong would only be continued to permit them to remain, and there will be no hesitancy whatever on the part of the board of directors to take action when in possession of all the facts.

We oftentimes hear people say what they would do. Some of us are overly willing to advance opinion when no responsibility is charged against us, but this is a momentous proposition for the Holstein-Friesian Association. The Herd Books of this great industry have been assaulted, and an insult and injury inflicted upon every breeder of the black and white wherever located, because in my opinion the man who has debauched our records has assaulted the good name and fame of the greatest breed of animals on the earth. There was no occasion for exaggeration, there was no occasion for fraud. The Holstein-Friesian cow has demonstrated herself on every occasion to be the most wonderful producer of milk and dairy products in existence, and this under legitimate and regular conditions.

I feel called upon to make this statement to the breeders at this time before action has been taken by the board of directors, because of publications occurring in papers in Boston and elsewhere, and it seemed to me that no additional harm could possibly come by giving the membership generally a history of the case, although my judgment had been that no report should be made until action was taken by the executive committee or board of directors and the particular animals affected specified, because the great bulk of animals tested by Cole are not questioned. It was only possible to perpetrate the fraud on one while testing six for advanced registry, and when certain supervisors were in charge at the Cabana Farm he made no attempt whatever to perpetrate the fraud. Consequently only a small number of the records made can be charged with fraud, and to have this information come out before full information could be given as to the animals that would be affected, seemed like causing a lot of anxiety among thousands of persons who had bought animals not knowing whether theirs were among the fraudulent ones.

Respectfully yours,

D. D. AITKEN.

## Cash In Big On Hogs—Don't Let Worms Steal Your Profits



### Make This Two Months' Test!

**No Money Needed--We Take All The Risk**

**ARE** you going to get your share of the big hog money this year? This is the question you face right now. And there is only one way—**Hogs Must Be Kept Healthy**

Just so long as your hogs suffer and fail to gain weight or die from Indigestion, Worms, Thumps and Jerks—you are losing more money for each hundred pounds, at the present high prices of pork, than you ever lost before. That is the reason you should be prepared with a safe, sure preventative, a reliable stock conditioner and an absolutely efficient worm destroyer.

## FELT'S SALT

is the original, standard made-on-honor salt tonic and worm killer. It kills and destroys all worms in stomach and intestines—and expels them from the body. At the same time, it aids digestion, tones up the system, purifies the blood and gives the animal the strength and stamina to resist disease. It is a worm and parasite destroyer—backed by a guarantee that is a guarantee.

### Pay Only When Results Are Proved

Tell us how many hogs you own—also how many horses, cattle and sheep. We will supply you with enough Felt's Medicated Salt for two months' feeding for all your animals. No strings to this offer. You are to be the judge.

Send the coupon today, or drop us a card. Our booklet which states just what Felt's Medicated Salt is guaranteed to do—and what it will not do—and which tells exactly what this safe, reliable, standard preparation contains—will be sent on request.

### Felt Medicated Salt Co.

210 North State Street,

Marion,

Ohio



Felt Medicated Salt Co. 210 N. State St. Marion, Ohio.

Gentlemen:—Without placing myself under obligation, send me details of your Riskless Two Months' Test Offer.

(State number of animals owned)

Sheep..... Cattle.....

Horses..... Hogs.....

Name .....

Address .....

## MICHIGAN LIVE STOCK INSURANCE COMPANY

INDEMNIFIES Owners of Live Stock—Horses, Cattle, Sheep and Hogs  
Against Death, by Accident or Disease

SAGINAW

GRAND RAPIDS

### HOGS

Two gilts for sale, sired by C. A. King Joe. Dam is sired by Great Big Half Ton, by Big Half Ton and out of a Dishier's Giant Sow. (Breeding.) Bred to Monster Big Bob by Lukon's Big Bob (same breeding as the Grand Champion of the World, Caldwell's Big Bob). A very valuable litter to possess. Fall pigs farrowing now. Book orders early. C. A. Boone, Blanchard, Mich.

### YORKSHIRES FOR SALE

Gilts bred for October farrowing. WATERMAN & WATERMAN, Meadowland Farm, Ann Arbor, Mich.

For Sale, Herd boar Gladstone Sensation. Fine type of Berkshire. Also a few of his pigs, both sex. Fairman Farms, Plymouth, Mich.

### SHEEP

## BUY A SHEEP

Wait a minute, buy Hampshires. The American Hampshire Sheep Association wants to send you a dandy little booklet with list of breeders. Some near you. Write COMFORT A. TYLER, Secretary, 22 Wood and Ave., Detroit, Mich.

### HAMPSHIRE

One of the best bred flocks in America. Home of the International Champion ewe of 1918. Name of all ages for sale. Write me your wants or come and see them. Harley R. Emmons, Elsie, Mich.

### Ingleside Farm Offers

30 recorded Shropshires—12 flock headers, 25 yearling rams for range or grade use, 43 ewes—mostly yearlings. Herbert E. Powell, Ionia, Mich.

Idle Wild Stock Farms Shropshire yearling rams from prize winning stock. Make your selection early. Cliff Middleton, proprietor, Clayton, Mich. R. 3.

Shropshires Am offering 16 yearling rams and 8 yearling ewes of Senator Bibby breeding. C. J. THOMPSON, Rockford, Mich.

Shropshires—Rams Bred from McKerron's Holker 275-10142-13773-9 English strain. Dan Boether, R. 4, Ewart, Mich.

For Shropshire Yearling Rams write or call on ARMSTRONG BROS., R. 3, Fowlerville, Mich.

For Sale Three Registered Oxford Yearling Rams \$40 each. Reg. and Del. for quick sale. Don't wait. J. Robert Hicks, St. Johns, Mich.

For Sale. Registered Oxford rams, 2 ram lambs 1. Abbott, Phone Deckerville. 78-3 R. 2, Palms, Mich.

Extra good yearlings and lamb rams of good breed. E ing for sale. We are also offering a few aged ewes. Floyd J. Anderson, R. D. No. 10, St. Johns, Mich.

### HORSES

Percherons, Holsteins, Angus, Shropshires, Durocs DORR D. BUELL, Elmira, Michigan.

### BREEDERS OF PERCHERONS

Important, (Wt. 2350) Sire of one & two yr. olds. Sevier a ton son with 14 in. bone at two years in service. Mares as good. Young stock for sale. Chas. Osgood & Sons, Mendon, Michigan.

Percheron Stallions and mares at reasonable prices. Inspection invited. F. L. KING & SON, Charlotte, Mich.

### For Sale—A Car Of Grade Draft Colts

Chas. Bray, Okemos Ingham Co. Mich.

Please Mention The Michigan Farmer When Writing to Advertisers.



# LATEST MARKET REPORTS

## SECOND EDITION.

The markets in this edition were revised and corrected on Thursday afternoon, August 28.

### WHEAT.

Although the wheat market is dull, a feeling of slightly more optimism prevails, with prices advancing a fraction on the local market. At the opening this week, however, Minneapolis quoted lower figures following increased receipts at western market centers. Uncertainty as to the future of the food situation causes millers and dealers to hesitate about taking hold of the market in a strong way. A year ago No. 2 red wheat was selling on the local market at \$2.22. Present Detroit prices are:

No. 1 red	.....\$2.27
No. 1 mixed	.....2.25
No. 1 white	.....2.25
No. 2 red	.....2.24
No. 3 red	.....2.20

### CORN.

Last week holders of corn sold freely upon learning that Texas was shipping new corn into the northern states. This forced prices to a lower level but failed to hold them there because the volume of grain from the Lone Star state promises to be only a small factor in the immediate future marketing. Early this week commission houses were buying, but there was no large shipping demand at Chicago. Present quotations there are: No. 2 mixed corn \$1.94@1.94½; No. 2 yellow \$1.94@1.95; September \$1.80½; December \$1.43¼. A year ago on the local market No. 3 corn was selling at \$1.65 per bushel. Present Detroit prices are:

No. 3 corn	.....\$2.02
No. 3 yellow	.....2.06
No. 4 yellow	.....2.04
No. 5 yellow	.....1.99

### OATS.

The position of this grain has been somewhat stronger than that of corn. Prices have followed the quotations of corn, but over a somewhat narrower limit. Receipts have been less than dealers were calculating on. At Chicago No. 2 white oats are quoted at 72@76½c; No. 3 white at 73@74c. A year ago standard oats were quoted at Detroit at 71c. Present quotations here are:

No. 2 white	.....81
No. 3 white	.....80½
No. 4 white	.....79½
No. 3 white (new)	.....76½

### RYE.

Receipts at country elevators are increasing, while prices have weakened, being quoted at \$1.50 for cash No. 2 on the local market.

### BEANS.

The market has been quiet throughout the past week. Lacking speculative interest and export demand, the dealers have very little to do just now. Quotations on the various markets do not represent actual sales in most cases. In New York choice pea beans are quoted at \$8.50; common to fair \$7@8.25; medium choice \$9; red kidneys choice \$13.50@14. The trade is slow at Chicago, where the market is feeling the influence of the fight on the high cost of living. Hand-picked pea beans, choice to fancy are quoted there at \$8.75@9; do fair to good \$8@8.50; red kidneys \$11.50@12. Detroit's market is inactive and easy, with prices reduced to \$8.10 per cwt. for immediate and prompt shipment.

### FEEDS.

The feed market shows no change, despite the recent fluctuations in corn prices. Detroit quotations to jobbers are: Bran \$47; standard middlings \$56; fine middlings \$64; coarse corn meal \$81; cracked corn \$83; corn and oat chop \$63 per ton in 100-lb. sacks.

### SEEDS.

In Toledo prime cash cloverseed is quoted at \$30; October \$30.40; prime cash alsike \$25.45; October alsike at \$25.45. The Detroit market quotes prime red clover at \$30; October at \$30.50; timothy \$5.50. In some of the important seed producing counties of the state farmers have disposed of their surplus seed at comparatively low prices. The outlook is for a short age, and prices are almost certain to

be much higher this winter and coming spring.

### HAY.

Consumers of hay are having difficulty in satisfying their wants. Detroit prices are unchanged as follows: No. 1 timothy \$31@32; standard \$30@31; light mixed \$29@30; No. 1 clover \$25@26.

Pittsburgh.—The market is dull with present receipts in excess of the demand. Quotations are: No. 1 timothy \$34@34.50; No. 1 light mixed \$30; No. 1 clover mixed \$30@31; No. 1 clover \$30@31.

### POTATOES.

Receipts of potatoes are increasing and prices show a tendency downward as a result. At Detroit New Jersey Cobblers at selling at \$5.85@6 per 150-lb. sack. At Chicago the demand and movement is slow with the market unsettled and prices lower; the Early Ohio, field run, are selling there at \$2.40@2.50 per cwt. The Pittsburgh market is in a similar position, having liberal supplies. The late potato crop is developing satisfactorily in some regions, and poorly in other places. The late Minnesota crop is good, while

the early crop from that state is now being marketed. In Wisconsin recent rains have greatly benefited late potatoes; growers, however, are complaining of damage from leaf hoppers and blight. The New England crop is suffering for lack of moisture.

### BUTTER.

Butter markets are holding about steady with last week, with the prices for high and low grade stock gradually widening. Fancy butter is scarce, and in the majority of our market quotations are tending higher. On the other hand, lower grades are accumulating and dealers are finding it a little difficult to move such stock. At Detroit fresh creameries are jobbing at 51½@52c; at Chicago 46@54c; at New York 46@57½c; at Philadelphia western creamery extra is quoted at 57c per pound.

### EGGS.

Trading is on a firm basis with quotations steady to higher. Receipts are running largely to inferior grades, due to hot weather. At Detroit fresh candled current receipts are quoted at 43@44c, while the good fresh eggs bring 45@48c. In Chicago the market

runs higher with firsts at 41@42c; ordinary firsts 36@38c; storage packed firsts 42½@43c. A steady market obtains in New York with nearby western stock ranging from 54@72c. Philadelphia markets are steady with western extra firsts at \$15.60 per case.

### DETROIT CITY MARKET

A good volume of produce is coming to the city market these days. Tomatoes are offered freely, with the prices ranging from \$1@1.25 per bushel; No. 1 apples \$2.50@3; No. 2 \$1.50@2; wax beans \$1.50@2; green beans \$1.75@2.50; cabbage 75c@1; grapes at \$3; onions \$2.25@2.75; potatoes \$2.50@2.75; peppers \$1@1.50; pears \$2@3.25; peaches \$2.50@4; plums \$3@4; celery 40@65c per dozen; poultry, live 34c for old; 36c for springers; eggs 52@53c.

### WOOL.

American wool buyers who went to England to purchase supplies were disappointed in that they found the Britons anxious to sell medium and coarse grades and ready to pay a premium for fine wools the same attitude that the trade on this side takes. Mills in this country are working to capacity where sufficient help is available. Some fine unwashed delaine sold in Boston recently at 83c with quotations up to 85c. Michigan fine unwashed clothing changed hands there last week at 63c. According to government figures Ohio fine unwashable wool sold in Boston on the first days of July and August of this year at exactly the same price that the same grade brought for the same days of these months in 1918, or 61@62c per pound.

### GRAND RAPIDS

Farmers are sitting tight on their hay, with the result it advanced \$4 per ton at the city market last week. It is now \$30 and only one load was marketed and little if any is expected this week. They will be cautious in selling until they know their own requirements. They have been feeding for some weeks, as pasturage is very short, with prospects of having to continue through till next season. There were twelve cars of Duchess apples shipped from this market and loading stations the past week. They were bought at 75c@1 per bushel. This week shippers will start on the crop of Wealthy variety which is about 70 per cent full. Baldwin and Northern Spy are short. The estimate of western Michigan apple crop is 250,000 barrels, 50 per cent less than last year. Reporting the potato situation in western Michigan to the Federal Agricultural Bureau, John I. Gibson says the early crop, damaged by drought, is only 10 per cent of full, but that the late crop, doing well since rainfall, with 90 per cent as average condition. City market price last week was \$2@2.25 a bushel. There is more poultry being raised than ever before in this part of the state. Dealers pay 25 cents per pound for live broilers.

### NEWS OF THE WEEK.

(Continued from page 226).

Sunday, August 24.

**FOLLOWING** a raid on Fort Hancock by Mexican bandits, more American troops cross the Rio Grande to capture the outlaws.—The American Red Cross is asking for \$15,000,000 to aid in a campaign for the promotion of public health, extending the country's nursing resources, preparing for emergency disaster relief and to complete relief measures abroad.

Monday, August 25.

**UKRAINE** troops occupy Kiev, large parts of Volhynia and the whole of Podolia in southern Russia.—American troops return to the United States from Mexico. Chief of bandits is reported to have been killed by an American officer.—Archduke Joseph and the Hungarian cabinet resign as a result of the refusal of the peace conference to recognize them.—Ontario will vote on the prohibition question in October.

Tuesday, August 26.

**REPORTS** are now current that the Mexican federal forces halted American troops in the latter's chase after bandits.—Rumanians are opposing Yugoslav troops along the frontier as established by the inter-allied commission, which frontier is not satisfactory to Ru

## Live Stock Market Service

### Reports for Thursday, August 28th

#### BUFFALO.

Pigs sold here today at \$22 and mixed hogs at \$22.50@22.65; compared with other points, these prices are about \$1 too high. Lambs sold up to \$15.75 and calves to \$22.50.

#### DETROIT

##### Cattle.

Receipts 2,217. Canners 25c lower; other grades steady.

Best heavy steers	.....\$13.00@14.00
Best handy wt bu steers	.....10.00@11.50
Mixed steers and heifers	.....9.50@10.50
Handy light butchers	.....7.50@ 8.50
Light butchers	.....6.75@ 7.75
Best cows	.....9.00@10.00
Butcher cows	.....7.50@ 8.25
Cutters	.....6.75@ 7.75
Canners	.....6.00
Best heavy bulls	.....9.00@ 9.75
Bologna bulls	.....8.00@ 8.50
Stock bulls	.....7.00@ 7.75
Feeders	.....9.00@10.00
Stockers	.....7.00@ 8.50
Milkers and springers	.....\$ 75@ 125

##### Veal Calves.

Receipts 1,112. Market steady. Best .....\$22.00@22.50 Other grades .....8.00@18.00

##### Sheep and Lambs.

Receipts 6,523. Lambs 50c lower; sheep steady.

Best lambs	.....\$14.00@14.50
Fair lambs	.....12.50@13.50
Light to common	.....10.00@11.00
Fair to good sheep	.....8.00@ 9.00
Culls	.....4.00@ 6.00

##### Hogs.

Receipts 3,571. Market 50@75c lower; all grades \$20.

#### CHICAGO.

##### Hogs.

Estimated receipts today are 25,000; holdover 11,318. Market mostly \$1@1.25 lower than yesterday. Tops at \$20.25; heavy 250 lbs up, medium, good and choice \$17@19.25; medium 200 to 250 lbs, medium, good and choice at \$17.50@20; light 150 to 200 lbs, common, medium, good and choice \$18@20.25; light lights 130 to 150 lbs, common, medium, good and choice \$17.55@19.25; heavy packing sows 250 lbs up, smooth \$16@16.75; packing sows 200 lbs up, rough \$15.25@16; pigs 130 lbs down, medium, good and choice at \$16.50@18.50.

##### Cattle.

Estimated receipts today are 11,000. Market is very draggy on all killing grades at universally lower prices; feeders about steady; calves 25c lower. Beef steers, medium and heavy weight 1100 lbs up, choice and prime \$15.75@18.25; do medium and good at \$11.75@15.75; do common \$10@11.75; light weight 1100 lbs down, good and choice \$13.50@17.75; do common and medium \$9.25@13.50; butcher cattle, heifers, common, medium, good and choice \$7@14.75; cows, common, me-

dium, good and choice \$6.75@13.25; bulls, bologna and beef \$6.50@12.25; canners and cutters, cows and heifers \$5.75@6.75; do canner steers at \$6.25@9.25; veal calves, light and handy-weight, medium, good and choice at \$19.50@20.50; feeder steers, common, medium, good and choice \$7.75@13.75; stocker steers, common, medium, good and choice \$7@11; stocker cows and heifers, common, medium, good and choice \$7@8.75; stocker calves, common, medium, good and choice \$8@11; western range cattle, beef steers, medium, good and choice \$11@16.25; do cows and heifers, medium, good and choice \$8.50@13.25.

##### Sheep and Lambs.

Estimated receipts today are 38,000. Market slow; native lambs mostly 50c lower; bulk of good to choice natives \$15; feeders slow. Lambs 84 lbs down medium, good, choice and prime at \$13@15.50; do culls and common \$8.50@12.50; spring lambs, medium, good, choice and prime \$10@12.25; ewes, medium, good and choice \$7.50@9; ewes cull and common \$3@7; breeding ewes full mouths to yearlings \$8.50@14.75; yearlings wethers, medium, good and choice \$13@14.75.

#### BUFFALO.

Wednesday, August 27, 1919.

##### Cattle.

Receipts 10 cars. Market is slow. Prime heavy steers \$16@17; best shipping steers \$13.50@14; medium shipping steers \$12.50@13; best native yearlings 950 to 1000 lbs \$16@17; light native yearlings, good quality at \$12.50@13.50; best handy steers \$12@13; fair to good kind at \$10.50@11.50; handy steers and heifers, mixed \$12@13; western heifers \$11@12; state heifers \$8.50@9.50; best fat cows at \$10.50@11; butchering cows \$8@9; cutters \$6.50@7; canners \$5@6; fancy bulls \$10@11; butchering bulls \$8@9; common bulls \$7@8; best feeders, 900 to 1000 lbs \$9@10; medium feeders at \$7.50@8.50; stockers \$7@8; light common \$6.50@7; best milkers and springers \$10@15; mediums \$75@90.

##### Hogs.

Receipts 10 cars. Market is steady. Heavy \$22.25@22.50; yorkers \$22.60; pigs \$21.70@21.75.

##### Sheep and Lambs.

Receipts 10 cars. Market is steady. Top lambs \$15.75; yearlings \$12; wethers \$10@10.50; ewes \$9@9.50.

### INTERNATIONAL ALBUM AND REVIEW.

Live stock men interested in the 1918 International Live Stock Exposition may secure the cloth-bound review and album of the 1918 Exposition by sending 50 cents to Mr. B. H. Heide, Secretary and General Superintendent, International Live Stock Exposition, Chicago, Ill.



## FARMERS' CLUB PICNIC.

THE State Farmers' Club picnic held at the M. A. C. grounds at East Lansing on August 21, brought out an attendance of more than five hundred people. At eleven o'clock a trip by auto, led by the college guide, was made. After dinner the following program was carried out from the platform which had been nicely arranged by the college authorities for the occasion.

After community singing led by Mr. J. S. Taylor, Mr. Kedzie made an address of welcome to the people who had gathered at the college grounds. Following the customary official reports, Prof. Anderson, of the College, gave an interesting address upon the subject of "Why the Farmers Organize." Among the reasons Prof. Anderson said, were (1) because they do not get a fair price for their product; (2) because the prices they receive are below that of the cost of production; (3) because they do not get a living wage for their labor.

Following Prof. Anderson's address, Prof. A. G. Brown explained the work of the animal husbandry department and Prof. F. G. Cox told about the farm crops department trying out new varieties of farm crops. The matter of farm drainage was ably discussed by Prof. Musselman.

The election of officers resulted in the re-election of the old officers: G. Garden, president; I. W. Cargo, vice-president; Mrs. S. R. Holmes, secretary-treasurer.

## LIVINGSTON COUNTY BREEDERS.

One of the best examples of the efforts of community stock breeding to interest the people of an entire county in the practice of breeding better live stock was the delegation of more than two hundred Livingston county Holstein enthusiasts who attended the State Holstein-Friesian Breeders' Picnic at East Lansing on August 23. Led by County Agent Dunks this delegation proved an inspiration to other county agents who are endeavoring to organize strong breeders' organizations in their respective counties.

## VEGETABLE GROWERS' ASSOCIATION OF AMERICA.

The eleventh annual convention of the Vegetable Growers' Association will be held at the Statler Hotel, Detroit, on September 9-12.

## Program.

Tuesday, September 9, 10:00 A. M.

The address of welcome by Mayor Cousins, of Detroit, will be responded to by President Howard W. Selby, of the association. The business session and announcements will follow.

Tuesday afternoon the general subject, "Cooperation," will be featured: "Cooperation Among Producers," by Hale Tennant, (in charge of government and state cooperative work in Michigan); "A Producers' Organization that Cooperates," by Dorr Buell, manager of Michigan Potato Growers' Exchange; "The Ashtabula Lettuce Growers' Association," E. A. Dunbar, Ohio; "Cooperation Among the Toledo Gardeners," Louis F. Miller, of Ohio; "Cooperation in New England," Howard W. Selby.

Tuesday evening Alfred Vivian of Ohio will present his lecture on "Vegetable Growing in Foreign Countries."

Wednesday, September 10, 9:30 A. M.

Market Gardeners' Section—"Experimental Work in Connection with Ontario Vegetable Growing," Prof. A. H. MacLennan, Toronto; "Developing Improved Strains of Varieties of Vegetables," Prof. J. W. Crow, Ontario; "The Use of Commercial Fertilizers and Lime in Connection with Vegetable Growing," Prof. E. O. Fippin.

Greenhouse Section—"Past, Present and Future of Vegetable Forcing," Mr. Frank Luce, Ohio; "Vegetable Forcing at Cleveland, Ohio," H. H. Richardson, Ohio; "Better Crops for the Greenhouse," An experience meeting led by Chairman Thompson.

Muck Land Section—"Promising New Crops for Muck Lands," Mrs. Osborne; "Growing Plants on Muck Soil," E. L. Woodhams; "Muck Land Problems," Ezra Levin; "Commercial Fertilizers on Muck Land," Prof. E. O. Fippin.

Wednesday afternoon is given over to an inspection trip. Wednesday evening is theater night, and Thursday morning the visitors will visit Detroit's city markets.

Thursday, September 11, 9:30 A. M.

Market Gardeners' Section—"Work at the Virginia Truck Experiment Station," Prof. T. C. Johnson, of Virginia; "Work on a Two-thousand-acre Vegetable Farm," R. W. DeBaun, New Jersey; "Muskmelon Culture," (illustrated), H. B. Blandford, Michigan.

Greenhouse Section—"Development of Vegetable Forcing at Toledo, Ohio," George Bayer, Ohio; "Experimental Work in the Greenhouses at the Ohio Experiment Station," Prof. W. J. Green; "Some diseases of Greenhouse Crops and their Control," Prof. A. D. Selby, Ohio.

Muck Land Section—"Growing Celery in the Kalamazoo Region," Ezra Levin; "Onion Growing on Muck Land," C. E. Downing. Round-table discussion on diseases of muck land crops, led by Prof. G. H. Coons.

Thursday afternoon Detroit gardeners have arranged to entertain with a boat ride and Thursday evening will occur the annual banquet at the Hotel Statler.

Friday, September 12, 9:30 A. M.

"Storage of Vegetables," Prof. H. C. Thompson, New York; "Extension Work for Vegetable Growers," C. E. Durst, Anna, Illinois; "Possibilities of State Association Work," Prof. L. M. Montgomery, Ohio; round-table discussion of diseases of vegetables and their control, Dr. G. H. Coons.

Friday afternoon special committees will report and members will elect officers.

Many of the fields of sand, loam, clay and muck of this state respond generously to applications of acid phosphate.

Every farmer who has not ascertained to his satisfaction through field trials the need of phosphorus on his land should do so.

## Veterinary.

CONDUCTED BY DR. W. C. FAIR.

Worms in Horses.—Can you tell me what to give my horse that is troubled with worms? Have used some of the commercial remedies which failed to help him. R. J. K., Big Rapids, Mich.—Give your horse 1 dr. of santolin and 1 oz. of ground gentian in a bran mash three times a week for two weeks. Giving one ounce of turpentine in one pint of raw linseed oil occasionally is a fairly good remedy.

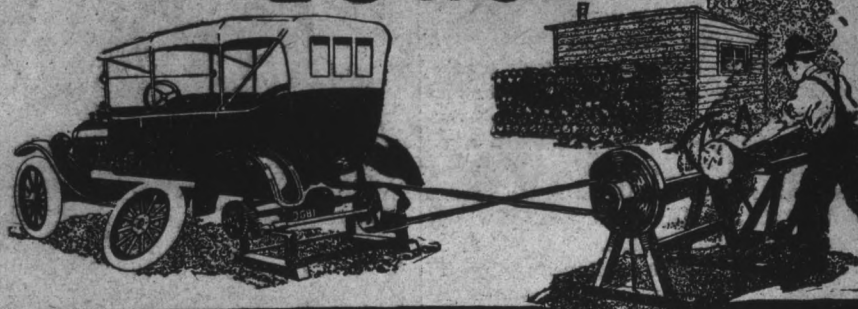
Bowed Tendons.—I have a horse that is troubled with bowed tendons and if there is a remedy for this ailment, please let me have it. D. L. Gobleville, Mich.—If your horse travels sound, showing no lameness, you had better leave him alone; however, if his tendons are weak, apply one part cantharides and six parts lard every ten days.

Wire Wound on Hock.—I would like to know what to apply to wound on hock caused by wire cut. I had formula but lost it. One ingredient was powdered alum. F. R., Swan Creek, Mich.—Mix one part powdered alum, three parts oxide zinc and four parts boric acid to wound twice a day. If this is a malignant, angry appearing fungus, dissolve one ounce of permanganate of potash in half a pint of water, shake well and paint fungus twice daily.

Barren Cows.—This is the first year I have had trouble in getting my cows in calf. Some of them have been served five or six times. Have heifers that are in same condition, and I might add that we have changed bulls. M. D., Manistee, Mich.—Dissolve 3 ozs. of bicarbonate of soda in two quarts of clean tepid water and flush vagina two or three hours before the cow is served. You had better use a fountain syringe. Healthy cows that come in heat regularly will generally get with calf some time. I know of no better plan than to keep on breeding them to bulls that are fairly sure calf getters. Are you sure that your herd is free from contagious abortion?

Wirecut Near Foot.—One of my horses cut leg with barbed wire, making a wound near foot. I have been washing wound with water and applied carbolic lotion. Have also applied other healing remedies, all of them have failed to do it much good. A. T., Romulus, Mich.—Paint sore occasionally with tincture of iodine and apply equal parts of oxide of zinc and boric acid twice a day. Cover sore with oakum and a light bandage.

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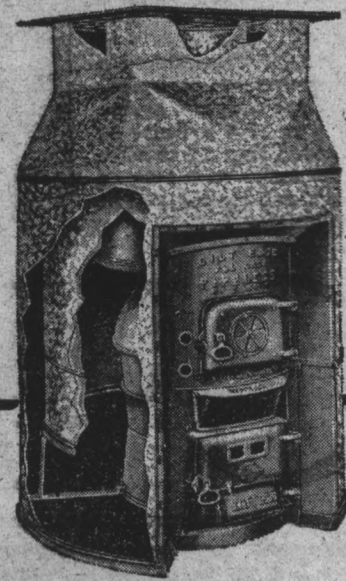
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## MR. POWELL HONORED.

G. HAROLD POWELL, general manager of the California Fruit Growers' Exchange, has been awarded the Cross of Chevalier of the Order of the Crown, by King Albert of Belgium, in recognition of his services in behalf of the Belgian sufferers during the war. News of this honor was received from the president of the executive committee in Brussels. Mr. Powell was in charge of the distribution of perishable food products for the Food Administration in Washington from July, 1917, to May, 1919, during which time his department hastened food to the starving people of Belgium.

## WELL-ATTENDED PICNICS.

RECENTLY we attended two picnics that emphasized to us the renewed interest that is being taken in agriculture and rural life. One of these picnics was in Macomb county where fully 2,500 farmers, their families and friends gathered from all townships of that county to enjoy a good time and to learn what could be gathered by mingling with neighbors and strangers and from the programs. The other was at Diamond Grove in Alpena county, where over 1,500 persons came out to the first county farmers' picnic. Both of these events were under the general supervision of the county agricultural agents and their co-workers in the respective counties. Mr. Kittle, of Macomb county, and Mr. Scheetz, of Alpena, and those who assisted each of them, are to be congratulated.

One of the reasons of the generous response appears to be that with the war over, home interests and problems are again taking a major part in our thinking. The horrors and anxiety attending upon the great world conflict did not leave room for the close consideration of matters that in comparison seemed trivial. But with the conflict ended local problems and interests are taking on larger proportions and we feel the necessity and the opportunity of dealing with them more exclusively.

Another reason is that the programs of these picnics were so varied that people of nearly every temperament were appealed to. Besides the usual basket lunch and speaking program the managements provided for good music, games and races, demonstrations, contests, etc. If one felt interested in only a single phase of the program he would go for that part of it. However, it is a matter of observation that everybody from the grandmothers down to the babies was on hand at practically every event.

But the enthusiasm and the responsive spirit prevailing has a still more significant cause, we believe. Back of the events have been months of painstaking effort by county and local leaders, with little groups throughout these counties and the leaven that was placed here and there is working into and permeating the whole lump. The spirit of cooperation and organization is in the air and farmers generally have allowed the germ to get seated in their systems. There is no longer much argument on the need of getting together for business, social and educational purposes. In the minds of the majority of these thinking farmers this need is imperative. The only thing that troubles them is "how shall we go about it."

Here, then, is real evidence that the respective county agents are performing well their tasks, are gaining the confidence of the people with whom they are working, and are developing efficient community leaders, all of which will mean much to farming in the months and years ahead.



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Practically the entire world of music is ready in player rolls. If the orchestra is learning a new piece, the Gulbransen shows "how it goes." It is a great help to band leaders for rehearsals.

There are many refinements in the Gulbransen that help in playing with other instruments. It transposes to any key that is easiest for the other instruments. It responds instantly to changes in tempo. Any part of a roll may be silenced. Either bass or treble on the entire scale may be subdued to bring out solos on other instruments.

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If you will look up our dealer and try the Gulbransen, you will get a new idea of the possibilities of such an instrument. You can play it not only easily, but satisfyingly—to yourself and others.

At the right are a few selections appropriate for the home orchestra. Try them on the Gulbransen at our dealer's store. He shows the Baby at the Pedals in his window and newspaper advertising. If you don't know him, write us for his address.



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- |   |                                       |
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| I Want a Doll                           | *Liebestraum—Liszt                    |
| How You Gonna Keep 'em Down on the Farm | *Träumerei—Schumann                   |
| Till We Meet Again                      | *Flüchter—Chaminade                   |
| Dear old Pal of Mine                    | *Simple Aveu—Thom                     |
| *Carmen—Grand Fantasia                  | *Love's Dream After the Ball—Czibulka |
| *Tales of Hoffman—Bartok                | American Patrol—McCham                |
| *Thais—Meditation                       | Stars and Stripes—Souss               |
| Il Trovatore—Anvil Chorus               | Amoureuse—Berger                      |
| Lucia—Sextette                          | Estudiantina—Waldteufel               |
| Jocelyn—Berceuse                        | Hearts and Flowers—Tobani             |
|   | Light Cavalry—Suppe                   |

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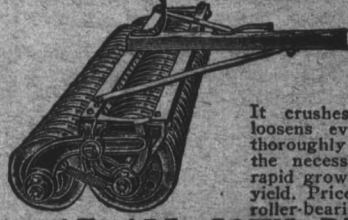
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